



State of Ohio Environmental Protection Agency

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Columbus, OH 43216-1049

**CERTIFIED MAIL**

**RE: FINAL PERMIT TO INSTALL  
PORTAGE COUNTY  
Application No: 16-02466  
Fac ID: 1667060121**

Y	TOXIC REVIEW
	PSD
Y	SYNTHETIC MINOR
	CEMS
	MACT
	NSPS
	NESHAPS
	NETTING
	MAJOR NON-ATTAINMENT
Y	MODELING SUBMITTED
	GASOLINE DISPENSING FACILITY

**DATE: 4/12/2007**

Parker Hannifin Parflex Division  
Matt Conner  
1300 N Freedom St  
Ravenna, OH 44266

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 of the Director is final and may be appealed to the Environmental Review Appeals Commission pursuant to Section 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. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of \$70.00 which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. 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, OH 43215

Sincerely,

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

CC: USEPA

ARAQMD



**Permit To Install  
Terms and Conditions**

**Issue Date: 4/12/2007  
Effective Date: 4/12/2007**

**FINAL PERMIT TO INSTALL 16-02466**

Application Number: 16-02466  
Facility ID: 1667060121  
Permit Fee: **\$22000**  
Name of Facility: Parker Hannifin Parflex Division  
Person to Contact: Matt Conner  
Address: 1300 N Freedom St  
Ravenna, OH 44266

Location of proposed air contaminant source(s) [emissions unit(s)]:  
**1300 N Freedom St  
Ravenna, Ohio**

Description of proposed emissions unit(s):  
**Synthetic Minor Permit to avoid Title V Applicability.**

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

Chris Korleski  
Director

## **Part I - GENERAL TERMS AND CONDITIONS**

### **A. Permit to Install General Terms and Conditions**

#### **1. Compliance Requirements**

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

#### **2. Reporting Requirements**

The permittee shall submit required reports in the following manner:

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

#### **3. Records Retention Requirements**

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

#### **4. Inspections and Information Requests**

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

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

**5. Scheduled Maintenance/Malfunction Reporting**

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

**6. Permit Transfers**

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

**7. Air Pollution Nuisance**

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

**8. Termination of Permit to Install**

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

**9. Construction of New Sources(s)**

The proposed emissions unit(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions

may lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed sources cannot meet the requirements of this permit or cannot meet applicable standards.

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

**10. Public Disclosure**

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

**11. Applicability**

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

**12. Best Available Technology**

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

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

This facility is permitted to operate each source described by this Permit to Install for a period of up to one year from the date the source commenced operation. This permission to operate is granted only if the facility complies with all requirements contained in this

permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within ninety (90) days after commencing operation of the emissions unit(s) covered by this permit.

#### **14. Construction Compliance Certification**

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

#### **15. Fees**

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

### **B. Permit to Install Summary of Allowable Emissions**

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

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

<u>Pollutant</u>	<u>Tons Per Year</u>
OC	51.28
VOC	41.33
PE	24.71
individual HAP	9.95
total combined HAPs	24.9

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

**A. Applicable Emissions Limitations and/or Control Requirements**

- 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>
P006 - Process 01 - Plasticized Nylon Air Extrusion Operations (see Table 1. Process 01 - Plasticized Nylon Air Extrusion Operations Emissions Units).	OAC rule 3745-31-05(A)(3)	<p>The emissions from extruder J-727 shall not exceed:</p> <p>0.66 pound of volatile organic compounds (VOC)* per hour</p> <p>0.551 pound of particulate emissions (PE) per hour and 2.41 tons of PE per year</p> <p>The emissions from extruder K-326 shall not exceed:</p> <p>0.66 pound of VOC* per hour</p> <p>0.551 pound of PE per hour and 2.41 tons of PE per year</p> <p>The emissions from extruder J-997 shall not exceed:</p> <p>1.31 pounds of VOC* per hour</p> <p>0.817 pound of PE per hour and 3.58 tons of PE per year</p> <p>The emissions from extruder L-810 shall not exceed:</p> <p>0.69 pound of VOC* per hour</p>

0.551 pound of PE per hour and  
2.41 tons of PE per year

The emissions from extruder L-  
809 shall not exceed:

0.09 pound of VOC\* per hour

0.09 pound of PE per hour and  
0.38 ton of PE per year

The emissions from extruder  
EX177 shall not exceed:

0.07 pound of VOC\* per hour

0.07 pound of PE per hour and  
0.32 ton of PE per year

The emissions from extruder  
EX244 shall not exceed:

0.95 pound of VOC\* per hour

0.657 pound of PE per hour and  
2.88 tons of PE per year

The emissions from extruder  
EXTDR-003 shall not exceed:

0.06 pound of VOC\* per hour

0.06 pound of PE per hour and  
0.27 ton of PE per year

The emissions from extruder  
EXTDR-001 shall not exceed:

0.07 pound of VOC\* per hour

0.07 pound of PE per hour and  
0.29 ton of PE per year

The emissions from extruder  
EXTDR-017 shall not exceed:

1.31 pounds of VOC\* per hour

0.817 pound of PE per hour and  
3.58 tons of PE per year

The emissions from extruder  
EXTDR-005 shall not exceed:

0.09 pound of VOC\* per hour

0.09 pound of PE per hour and  
0.38 ton of PE per year

The emissions from extruder  
EXTDR-006 shall not exceed:

0.06 pound of VOC\* per hour

0.06 pound of PE per hour and  
0.27 ton of PE per year

The emissions from extruder  
EXTDR-016 shall not exceed:

0.08 pound of VOC\* per hour

0.08 pound of PE per hour and  
0.34 ton of PE per year

The emissions from extruder  
EXTDR-007 shall not exceed:

0.58 pound of VOC\* per hour

0.551 pound of PE per hour and  
2.41 tons of PE per year

The emissions from extruder  
EXTDR-014 shall not exceed:

0.63 pound of VOC\* per hour

0.551 pound of PE per hour and  
2.41 tons of PE per year

	<p>The emissions from extruder EXTDR-018 shall not exceed:</p> <p>0.09 pound of VOC* per hour</p> <p>0.09 pound of PE per hour and 0.38 ton of PE per year</p> <p>The following extruders shall employ an oil mist/smoke mist filter to control emissions of VOC* and PE: extruder L-809, extruder EX177, extruder EXTDR-003, extruder EXTDR-001, extruder EXTDR-005, extruder EXTDR-006, extruder EXTDR-016, and extruder EXTDR-018.</p> <p>The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A).</p>
<p>OAC rule 3745-35-07(B)(1) (synthetic minor to avoid Title V, nonattainment NSR and MACT requirements)</p>	<p>The emissions of VOC* from this emissions unit shall not exceed 16.13 tons per year, based upon a rolling, 12-month summation of the monthly emissions.</p> <p>0.0073 pound of VOC* per pound of raw material employed</p> <p>The oil mist/smoke mist filter shall have an overall control efficiency of 94 percent for VOC* emissions.</p> <p>See B.2 below.</p>
<p>OAC rule 3745-17-07(A)</p>	<p>Visible PE from any stack shall not exceed 20% opacity, as a six-minute average.</p>
<p>OAC rule 3745-17-11(B)</p>	<p>The emission limitation specified by this rule is less stringent than or equivalent to the emission</p>

limitation established pursuant to OAC rule 3745-31-05(A)(3).

\*All organic compounds (OC) emitted from this emissions unit are assumed to be VOC; however, an undetermined percentage of these emissions is known to condense into a liquid state prior to being emitted to the atmosphere.

## **2. Additional Terms and Conditions**

- 2.a** The hourly VOC emission limitations and hourly PE limitations are based on each extruder's potential to emit. Therefore, no monitoring, record keeping or reporting is or will be required to demonstrate compliance with these emission limitations. Such requirements would be impractical and unreasonable given the nature of this emissions unit.
- 2.b** For all raw materials usage limitations, monitoring, record keeping, and reporting requirements that deal with raw materials usage in this permit, the total quantity of raw materials used/employed in this emissions unit during any rolling 12-month period is considered to be equivalent to the total quantity of raw materials purchased and received during that rolling 12-month period, except that any quantity of raw materials that can be shown to have been returned, rejected, or disposed after having been received shall not be considered to have been used.

## **B. Operational Restrictions**

1. The permittee shall not employ any raw material which contains any of the hazardous air pollutants (HAPs) listed in section 112(b) of the Clean Air Act in this emissions unit.
2. The maximum annual total raw materials usage rate for this emissions unit shall not exceed 10,000,000 pounds, based upon a rolling, 12-month summation of the monthly raw materials usage rates. Furthermore, the maximum annual raw materials usage rate for the uncontrolled extruders shall not exceed 4,061,955 pounds, based upon a rolling, 12-month summation of the raw materials usage rates.

[This emissions unit has been in operation for more than 12 months and, as such, the permittee has existing records to generate the rolling, 12-month summation of the total raw materials usage rate and the raw materials usage rate for the uncontrolled extruders upon issuance of this permit.]

### **C. Monitoring and/or Recordkeeping Requirements**

1. The permittee shall maintain monthly records of the following information for this emissions unit:
  - a. the identification of each raw material employed;
  - b. documentation as to whether or not each raw material employed contains any of the HAPs listed in section 112(b) of the Clean Air Act;
  - c. the total raw materials usage\* rate, in pounds;
  - d. the raw materials usage rate for the uncontrolled extruders\*\*, in pounds;
  - e. the rolling, 12-month total raw materials usage rate, in pounds;
  - f. the rolling, 12-month raw materials usage rate (for the uncontrolled extruders), in pounds;
  - g. the VOC emissions, in tons (i.e., the VOC emissions shall be calculated in accordance with the methodology in section E of this permit); and
  - h. the rolling, 12-month VOC emissions, in tons.

\* The total amount of raw materials purchased per rolling 12-month period (excluding any raw materials returned or rejected during that period) is consider to be equal to the amount of raw materials used/employed in that rolling 12-month period.

\*\* Calculated based on multiplying the total quantity of raw materials used/employed in plasticized nylon air extrusion processes at the facility by the worst case ratio of uncontrolled raw materials usage to total raw materials usage (current ratio = 0.4062).

### **D. Reporting Requirements**

1. The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the rolling, 12-month total raw materials usage rate limitation of 10,000,000 pounds. These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.
2. The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the rolling, 12-month raw materials usage rate limitation of 4,061,955 pounds (for the uncontrolled extruders). These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

3. The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the rolling, 12-month emission limitation for VOC of 16.13 tons. These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.
4. The permittee shall notify the Director (the ARAQMD) in writing if a raw material which contains any HAPs listed in section 112(b) of the Clean Air Act was employed in this emissions unit. The notification shall include a copy of such record and shall be sent to the Director (the ARAQMD) within 45 days after such an occurrence.
5. The permittee shall submit annual reports that specify the total VOC emissions from this emissions unit, the total amount of raw materials employed, and the total amount of raw materials employed by the uncontrolled extruders for the previous calendar year. These reports shall be submitted by January 31 of each year.

#### **E. Testing Requirements**

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

- a. Emission Limitations:

0.66 pound of VOC per hour, from extruder J-726  
0.66 pound of VOC per hour, from extruder K-326  
1.31 pounds of VOC per hour, from extruder J-997  
0.69 pound of VOC per hour, from extruder L-810  
0.95 pound of VOC per hour, from extruder EX244  
1.31 pounds of VOC per hour, from extruder EXTDR-017  
0.58 pound of VOC per hour, from extruder EXTDR-007  
0.63 pound of VOC per hour, from extruder EXTDR-014

Applicable Compliance Method:

Compliance with the hourly allowable VOC emission limitations above shall be demonstrated by multiplying the VOC emission factor of 0.0073 pound of VOC per pound of raw material employed\* by the maximum raw materials usage rate (in pounds).

If required and technically feasible, the permittee shall demonstrate compliance with the hourly allowable VOC emission limitations based on the results of emission testing conducted in accordance with Methods 18, 25, or 25A, as appropriate, of 40 CFR Part 60, Appendix A.

\*The VOC emission factor was determined by the supplier of the raw material through testing.

b. Emission Limitations:

0.09 pound of VOC per hour, from extruder L-809  
0.07 pound of VOC per hour, from extruder EX177  
0.06 pound of VOC per hour, from extruder EXTDR-003  
0.07 pound of VOC per hour, from extruder EXTDR-001  
0.09 pound of VOC per hour, from extruder EXTDR-005  
0.06 pound of VOC per hour, from extruder EXTDR-006  
0.08 pound of VOC per hour, from extruder EXTDR-016  
0.09 pound of VOC per hour, from extruder EXTDR-018

Applicable Compliance Method:

Compliance with the hourly allowable VOC emission limitations above shall be demonstrated by multiplying the VOC emission factor of 0.0073 pound of VOC per pound of raw material employed\* by the maximum raw materials usage rate (in pounds) times (1-0.94\*\*).

If required and technically feasible, the permittee shall demonstrate compliance with the hourly allowable VOC emission limitations based on the results of emission testing conducted in accordance with Methods 18, 25, or 25A, as appropriate, of 40 CFR Part 60, Appendix A.

\*The VOC emission factor was determined by the supplier of the raw material through testing.

\*\*The overall control efficiency for the oil mist/smoke mist filter is assumed to be 94%, by weight.

c. Emission Limitations:

0.09 pound of PE per hour, from extruder L-809  
0.07 pound of PE per hour, from extruder EX177  
0.06 pound of PE per hour, from extruder EXTDR-003  
0.07 pound of PE per hour, from extruder EXTDR-001  
0.09 pound of PE per hour, from extruder EXTDR-005  
0.06 pound of PE per hour, from extruder EXTDR-006  
0.08 pound of PE per hour, from extruder EXTDR-016  
0.09 pound of PE per hour, from extruder EXTDR-018

Applicable Compliance Method:

Compliance with the hourly allowable PE limitations above shall be demonstrated by multiplying the PE factor of 0.0073 pound of PE per pound of raw material employed\* by the maximum raw materials usage rate (in pounds) times (1-0.94\*\*).

If required and technically feasible, compliance with the hourly allowable PE limitations above shall be determined by using the test method(s) and procedures in Methods 1-5 of 40 CFR Part 60, Appendix A.

\*The PE factor was determined by the supplier of the raw material through testing.

\*\*The overall control efficiency for the oil mist/smoke mist filter is assumed to be 94%.

d. Emission Limitations:

0.551 pound of PE per hour, from extruder J-727  
0.551 pound of PE per hour, from extruder K-326  
0.817 pound of PE per hour, from extruder J-997  
0.551 pound of PE per hour, from extruder L-810  
0.657 pound of PE per hour, from extruder EX244  
0.817 pound of PE per hour, from extruder EXTDR-017  
0.551 pound of PE per hour, from extruder EXTDR-007  
0.551 pound of PE per hour, from extruder EXTDR-014

Applicable Compliance Method:

If required and technically feasible, compliance with the hourly allowable PE limitations above shall be determined by using the test method(s) and procedures in Methods 1-5 of 40 CFR Part 60, Appendix A.

e. Emission Limitations:

2.41 tons of PE per year, from extruder J-727  
2.41 tons of PE per year, from extruder K-326  
3.58 tons of PE per year, from extruder J-997  
2.41 tons of PE per year, from extruder L-810  
0.38 ton of PE per year, from extruder L-809  
0.32 ton of PE per year, from extruder EX177  
2.88 tons of PE per year, from extruder EX244  
0.27 ton of PE per year, from extruder EXTDR-003  
0.29 ton of PE per year, from extruder EXTDR-001  
3.58 tons of PE per year, from extruder EXTDR-017  
0.38 ton of PE per year, from extruder EXTDR-005  
0.27 ton of PE per year, from extruder EXTDR-006  
0.34 ton of PE per year, from extruder EXTDR-016  
2.41 tons of PE per year, from extruder EXTDR-007  
2.41 tons of PE per year, from extruder EXTDR-014  
0.38 ton of PE per year, from extruder EXTDR-018

Applicable Compliance Method:

The annual allowable PE limitations above were determined by multiplying the hourly allowable PE limitations by 8760 hours per year, and then dividing by 2000. Therefore, as long as compliance with the hourly allowable emission limitations is maintained, compliance with the annual allowable emission limitations shall be assumed.

f. Emission Limitation:

The emissions of VOC from this emissions unit shall not exceed 16.13 tons per year, based upon a rolling, 12-month summation of the monthly emissions.

Applicable Compliance Method:

Compliance with the annual allowable VOC emission limitation above shall be demonstrated through the record keeping requirements established in section C.1 of this permit.

g. Emission Limitation:

Visible PE from any stack shall not exceed 20% opacity, as a six-minute average.

Applicable Compliance Method:

Compliance with the visible PE limitation for any stack from the emissions unit shall be determined in accordance with the test method and procedures specified in OAC rule 3745-17-07(B)(1).

h. Emission Limitation:

0.0073 pound of VOC per pound of raw material employed (worst-case resin)

Applicable Compliance Method:

If required and technically feasible, the permittee shall demonstrate compliance with the allowable VOC emission limitation based on the results of emission testing conducted in accordance with Methods 18, 25, or 25A, as appropriate, of 40 CFR Part 60, Appendix A.

i. Emission Limitation:

The oil mist/smoke mist filter shall have an overall control efficiency of 94 percent, by weight, for VOC emissions.

Applicable Compliance Method:

If required and technically feasible, the permittee shall demonstrate compliance with the allowable VOC overall control efficiency limitation based on the results of emission testing conducted in accordance with Methods 18, 25, or 25A, as appropriate, of 40 CFR Part 60, Appendix A for control efficiency and Methods 204 through 204F, as specified in 40 CFR Part 51, Appendix M for capture efficiency. The permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the USEPA's "Guidelines for Determining Capture Efficiency," dated January 9, 1995.

j. Usage Limitation:

The maximum annual total raw materials usage for this emissions unit shall not exceed 10,000,000 pounds, based upon a rolling, 12-month summation of the monthly raw materials usage rates. Furthermore, the maximum annual raw materials usage for the uncontrolled extruders shall not exceed 4,061,955 pounds, based upon a rolling, 12-month summation of the raw materials usage rates.

Applicable Compliance Method:

Compliance with the annual allowable raw materials usage limitations above shall be demonstrated through the record keeping requirements established in section C.1 of this permit.

**F. Miscellaneous Requirements**

1. Modeling to demonstrate compliance with the Ohio EPA's "Air Toxic Policy" was not necessary because the emissions unit's maximum annual emissions for each toxic pollutant listed in OAC rule 3745-114-01 will be less than 1.0 ton. OAC Chapter 3745-31 requires a permittee to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that a new permit to install application would be required for an emissions unit if changes in the composition of the materials or use of new materials would cause the emissions of any pollutant listed in OAC rule 3745-114-01 that has a listed Threshold Limit Value (TLV), as documented in the most current version of the American Conference of Governmental Industrial Hygienists' (ACGIH's) handbook entitled "TLVs and BEIs" ("Threshold Limit Values for Chemical Substances and Physical Agents, Biological Exposure Indices"), to increase to above 1.0 ton per year.
2. All the terms and conditions of this permit are federally enforceable.

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

**A. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P007 - Process 02 - Tube Conditioning Operations (see Table 2. Process 02 - Tube Conditioning Operations Emissions Units).	OAC rule 3745-31-05(A)(3)	The emissions of volatile organic compounds (VOC)* from applicator TCM-002 shall not exceed 3.14 pounds per hour.
		The emissions of VOC* from applicator TCM-003 shall not exceed 1.55 pounds per hour.
		The emissions of VOC* from applicator TCM-004 shall not exceed 1.55 pounds per hour.
		The emissions of VOC* from applicator TCM-005 shall not exceed 1.55 pounds per hour.
		The emissions of VOC* from applicator TCM-006 shall not exceed 5.82 pounds per hour.
		See A.2.a below.
	OAC rule 3745-21-07(G)	See B.1 below.
	OAC rule 3745-35-07(B)(1) (synthetic minor to avoid Title V, nonattainment NSR and MACT requirements)	The emissions of VOC* from this emissions unit shall not exceed 3.54 tons per year, based upon a rolling, 12-month summation of the monthly emissions.

See B.3 below.

\*All organic compounds (OC) emitted from this emissions unit are considered to be VOC.

## **2. Additional Terms and Conditions**

- 2.a** The hourly VOC emission limitations are based on each applicator's potential to emit. Therefore, no monitoring, record keeping or reporting is or will be required to demonstrate compliance with these emission limitations. Such requirements would be impractical and unreasonable given the nature of this emissions unit.
- 2.b** For all tube conditioning solvent usage limitations, monitoring, record keeping, and reporting requirements that deal with tube conditioning solvent usage in this permit, the total quantity of tube conditioning solvent used/employed in this emissions unit during any rolling 12-month period is considered to be equivalent to the total quantity of tube conditioning solvent purchased and received during that rolling 12-month period, except that any quantity of tube conditioning solvent that can be shown to have been returned, rejected, or disposed after having been received shall not be considered to have been used.

## **B. Operational Restrictions**

1. The permittee shall not employ any liquid organic material in this emissions unit that is considered a photochemically reactive material. "Photochemically reactive material" is defined in OAC rule 3745-21-01(C)(5).
2. The permittee shall not employ any material which contains any of the hazardous air pollutants (HAPs) listed in section 112(b) of the Clean Air Act in this emissions unit.
3. The maximum annual tube conditioning solvent usage rate for this emissions unit shall not exceed 7,078 pounds, based upon a rolling, 12-month summation of the monthly tube conditioning solvent usage rates.

[This emissions unit has been in operation for more than 12 months and, as such, the permittee has existing records to generate the rolling, 12-month summation of the tube conditioning solvent usage rates, upon issuance of this permit.]

## **C. Monitoring and/or Recordkeeping Requirements**

1. The permittee shall maintain monthly records of the following information for this emissions unit:
  - a. the identification of each liquid organic material employed;

- b. documentation as to whether or not each liquid organic material employed is a photochemically reactive material, as defined by OAC rule 3745-21-01(C)(5);
- c. documentation as to whether or not each material employed contained any of the HAPs listed in section 112(b) of the Clean Air Act;
- d. the tube conditioning solvent usage\* rate, in pounds;
- e. the rolling, 12-month tube conditioning solvent usage rate, in pounds;
- f. the VOC emissions, in tons (i.e., (d) divided by 2000); and
- g. the rolling, 12-month VOC emissions, in tons.

\* The amount of tube conditioning solvent purchased per rolling 12-month period (excluding any tube conditioning solvent returned or rejected during that period) is considered to be equal to the amount of tube conditioning solvent used/employed in that rolling 12-month period.

#### **D. Reporting Requirements**

1. The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the rolling, 12-month tube conditioning solvent usage rate limitation of 7,078 pounds. These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.
2. The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the rolling, 12-month emission limitation for VOC of 3.54 tons. These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.
3. The permittee shall notify the Director (the ARAQMD) in writing if a photochemically reactive material (as defined in OAC rule 3745-21-01(C)(5)) was employed in this emissions unit. The notification shall include a copy of such record and shall be sent to the Director (the ARAQMD) within 45 days after such an occurrence.
4. The permittee shall notify the Director (the ARAQMD) in writing if a material which contains any HAPs listed in section 112(b) of the Clean Air Act was employed in this emissions unit. The notification shall include a copy of such record and shall be sent to the Director (the ARAQMD) within 45 days after such an occurrence.
5. The permittee shall submit annual reports that specify the total VOC emissions from this emissions unit and the total amount of tube conditioning solvent employed for the previous calendar year. These reports shall be submitted by January 31 of each year.

## **E. Testing Requirements**

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

- a. Emission Limitations:

The emissions of VOC from applicator TCM-002 shall not exceed 3.14 pounds per hour.

The emissions of VOC from applicator TCM-003 shall not exceed 1.55 pounds per hour.

The emissions of VOC from applicator TCM-004 shall not exceed 1.55 pounds per hour.

The emissions of VOC from applicator TCM-005 shall not exceed 1.55 pounds per hour.

The emissions of VOC from applicator TCM-006 shall not exceed 5.82 pounds per hour.

Applicable Compliance Method:

Compliance with the hourly allowable VOC emission limitations above shall be demonstrated by multiplying the density of the tube conditioning solvent (in pound per gallon) by the maximum hourly tube conditioning solvent usage rate (in gallons).

If required and technically feasible, the permittee shall demonstrate compliance with the hourly allowable VOC emission limitations based on the results of emission testing conducted in accordance with Methods 18, 25, or 25A, as appropriate, of 40 CFR Part 60, Appendix A.

- b. Emission Limitation:

The emissions of VOC from this emissions unit shall not exceed 3.54 tons per year, based upon a rolling, 12-month summation of the monthly emissions.

Applicable Compliance Method:

Compliance with the annual allowable VOC emission limitation above shall be demonstrated through the record keeping requirements established in section C.1 of this permit.

- c. Usage Limitation:

The maximum annual tube conditioning solvent usage for this emissions unit shall not exceed 7,078 pounds, based upon a rolling, 12-month summation of the monthly tube conditioning solvent usage rates.

Applicable Compliance Method:

Compliance with the annual allowable solvent usage limitation above shall be demonstrated through the record keeping requirements established in section C.1 of this permit.

**F. Miscellaneous Requirements**

1. Modeling to demonstrate compliance with the Ohio EPA's "Air Toxic Policy" was not necessary because the emissions unit's maximum annual emissions for each toxic pollutant listed in OAC rule 3745-114-01 will be less than 1.0 ton. OAC Chapter 3745-31 requires a permittee to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that a new permit to install application would be required for an emissions unit if changes in the composition of the materials or use of new materials would cause the emissions of any pollutant listed in OAC rule 3745-114-01 that has a listed Threshold Limit Value (TLV), as documented in the most current version of the American Conference of Governmental Industrial Hygienists' (ACGIH's) handbook entitled "TLVs and BEIs" ("Threshold Limit Values for Chemical Substances and Physical Agents, Biological Exposure Indices"), to increase to above 1.0 ton per year.
2. All the terms and conditions of this permit are federally enforceable.

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

**A. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
R001 - Process 03 - Reinforcement Operations (see Table 3. Process 03 - Reinforcement Operations Emissions Units).	OAC rule 3745-31-05(A)(3)	<p>The emissions of volatile organic compounds (VOC)* from each of the following applicators: BAA-003, BAA-004, BAA-005, BAA-006, BAA-007, BAA-008, BAA-009, and BAA-010 shall not exceed 0.82 pound per hour.</p> <p>The emissions of VOC* from each of the following applicators: BEA-001, BEA-002, and BEA-003 shall not exceed 0.53 pound per hour.</p> <p>The emissions of VOC* from applicator BEA-004 shall not exceed 1.51 pounds per hour.</p> <p>The emissions of VOC* from each of the following applicators: BNYA-001, BNYA-002, and BNYA-003 shall not exceed 2.04 pounds per hour.</p> <p>The emissions of organic compounds (OC)** from applicator BTA-001 shall not exceed 1.02 pounds per hour.</p> <p>The emissions of VOC* from each of the following applicators: BAA-</p>

OAC rule 3745-35-07(B)(1)  
(synthetic minor to avoid Title V,  
nonattainment NSR and MACT  
requirements)

001 and BAA-002 shall not exceed 0.27 pound per hour.

The emissions of OC\*\* from emissions units R001, R002, and R003, combined, shall not exceed 31.61 tons per year, based upon a rolling, 12-month summation of the monthly emissions.

The emissions of VOC\* from emissions units R001, R002, and R003, combined, shall not exceed 21.66 tons per year, based upon a rolling, 12-month summation of the monthly emissions.

The VOC content of each chemical employed shall not exceed 4.15 pounds of VOC per gallon of chemical 3, 7.05 pounds of VOC per gallon of chemical 4, 6.76 pounds of VOC per gallon of chemical 5, 6.77 pounds of VOC per gallon of chemical 8, 0.0 pound of VOC per gallon of chemical 10, 2.79 pounds of VOC per gallon of chemical 12, 3.31 pounds of VOC per gallon of chemical 13, 7.83 pounds of VOC per gallon of chemical 14, and 7.93 pounds of VOC per gallon of chemical 15\*\*\*.

See B.2 below.

The emissions of any individual hazardous air pollutant (HAP) from the entire facility (i.e., emissions units R001, R002, R003, and permit to install exempt and "de minimis" emissions units, combined) shall not exceed 9.95 tons per year, based upon a rolling, 12-month summation of the monthly emissions.

OAC rule 3745-21-07(G)

The emissions of total combined HAPs from the entire facility (i.e., emissions units R001, R002, R003, and permit to install exempt and "de minimis" emissions units, combined) shall not exceed 24.9 tons per year, based upon a rolling, 12-month summation of the monthly emissions.

For the following applicators: BAA-001, BAA-002, BAA-003, BAA-004, BAA-005, BAA-006, BAA-007, BAA-008, BAA-009, BAA-010, BEA-001, BEA-002, BEA-003, BEA-004, and BTA-001, the emission limitations specified by this rule are less stringent than the emission limitations established pursuant to OAC rule 3745-31-05(A)(3).

For the following applicators: BNYA-001, BNYA-002, and BNYA-003, see B.1 below.

\*All OC emitted from applicators BAA-001, BAA-002, BAA-003, BAA-004, BAA-005, BAA-006, BAA-007, BAA-008, BAA-009, BAA-010, BEA-001, BEA-002, BEA-003, BEA-004, BNYA-001, BNYA-002, and BNYA-003 are considered to be VOC.

\*\*OC emitted from applicator BTA-001 are not considered to be VOC.

\*\*\*The pound(s) of VOC per gallon limitations are 2% higher than the VOC content supplied by the material manufacturer in order to account for inherent fluctuations in actual material formulation.

## **2. Additional Terms and Conditions**

- 2.a** The hourly VOC and OC emission limitations are based on each applicator's potential to emit. Therefore, no monitoring, record keeping or reporting is or will be required to demonstrate compliance with these emission limitations. Such requirements would be impractical and unreasonable given the nature of this emissions unit.
- 2.b** For all chemical usage limitations, monitoring, record keeping, and reporting requirements that deal with chemical usage in this permit, the total quantity of chemical used/employed in this emissions unit during any rolling 12-month period is considered to be equivalent to the total quantity of chemical purchased and received during that rolling 12-month period, except that any quantity of chemical that can be shown to have been returned, rejected, or disposed after having been received shall not be considered to have been used.

## **B. Operational Restrictions**

1. The permittee shall not employ any liquid organic material in applicators BNYA-001, BNYA-002, and BNYA-003 that is considered a photochemically reactive material. "Photochemically reactive material" is defined in OAC rule 3745-21-01(C)(5).
2. The maximum annual chemical 5, chemical 8, chemical 10, chemical 12, chemical 13, chemical 14, and chemical 15 usage rates (for emissions units R001 and R002, and R003, combined) shall not exceed 338 gallons, 1238 gallons, 4077 gallons, 1993 gallons, 745 gallons, 125 gallons, and 500 gallons, respectively, based upon rolling, 12-month summations of the monthly chemicals usage rates.
3. The maximum annual net chemical 3 and chemical 4 usage rates (for emissions units R001 and R002, and R003, combined) shall not exceed 326 gallons and 2604 gallons, respectively, based upon rolling, 12-month summations of the net\* monthly chemicals usage rates.

[Emissions units R001, R002, and R003 have been in operation for more than 12 months and, as such, the permittee has existing records to generate the rolling, 12-month summation of the chemicals usage rates and the net chemicals usage rates upon issuance of this permit.]

\*The net chemicals usage rate is defined as the amount of chemicals used minus the amount of chemicals returned, rejected or disposed of as waste. In addition, it is assumed that the amount of chemicals purchased is equivalent to the amount of chemicals used/employed.

**C. Monitoring and/or Recordkeeping Requirements**

1. The permittee shall maintain monthly records of the following information for applicators BNYA-001, BNYA-002, and BNYA-003:
  - a. the identification of each liquid organic material employed; and
  - b. documentation as to whether or not each liquid organic material employed is a photochemically reactive material, as defined by OAC rule 3745-21-01(C)(5).
  
2. The permittee shall maintain monthly records of the following information for emissions units R001, R002, and R003, combined:
  - a. the company identification of each chemical employed;
  - b. the VOC content of each chemical employed\*, in pounds of VOC per gallon of chemical;
  - c. the OC content of each chemical employed, in pounds of OC per gallon of chemical;
  - d. the individual HAP<sup>1</sup> content for each HAP of each chemical employed, in pounds of individual HAP per gallon of chemical;
  - e. the total number of gallons of each chemical employed;
  - f. the total number of gallons of chemical 3 and chemical 4 returned, rejected, or disposed of as waste;
  - g. the rolling, 12-month chemicals usage rates for each chemical\*\*, in gallons;
  - h. the rolling, 12-month net chemicals usage rates for chemical 3 and chemical 4, in gallons;
  - i. the amount of waste removed from the facility for emissions units R001, R002, and R003, combined, in pounds;
  - j. the VOC content of the waste removed, in pounds of VOC per pound of waste;
  - k. the OC content of the waste removed, in pounds of OC per pound of waste;
  - l. the individual HAP content for each HAP of the waste removed, in pound of individual HAP per pound of waste;
  - m. the VOC emissions, in tons (i.e., the sum of (b) times (e) for each chemical minus (i) times (j) for all waste removed, and then divide by 2000);

- n. the OC emissions, in tons (i.e., the sum of (c) times (e) for each chemical minus (i) times (k) for all waste removed, and then divide by 2000);
- o. the total individual HAP emissions for each HAP from all the chemicals employed, in tons per month (i.e., for each HAP the sum of (d) times (e) for each chemical minus (i) times (l) for all waste removed plus (x)<sup>\*\*\*</sup>/12, and then divide by 2000);
- p. the total combined HAPs emissions from all the chemicals employed, in tons per month (i.e., the sum of the total individual HAP emissions in (o)); and
- q. the rolling, 12-month VOC, OC, each individual HAP, and total combined HAPs emissions, in tons.

<sup>1</sup>A listing of the HAPs can be found in Section 112(b) of the Clean Air Act or can be obtained by contacting your Ohio EPA field office or local air agency contact. Material Safety Data Sheets typically include a listing of the solvents contained in the coatings or cleanup materials. This information does not have to be kept on a line-by-line basis.

\* The amount of chemicals purchased per rolling 12-month period (excluding any chemicals returned or rejected during that period) is considered to be equal to the amount of chemicals employed/used in that rolling 12-month period.

\*\* This record does not need kept for chemical 3 and chemical 4.

\*\*\* "x" is the potential to emit of each individual HAP for all permit to install exempt and "de minimis" emissions units in tons per year.

- 3. The permit to install for this emissions unit R001 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 to this emissions unit for each toxic pollutant listed in OAC rule 3745-114-01, using data from the permit to install application, and modeling was performed for the toxic pollutant(s) emitted at over a ton per year using the SCREEN 3.0 model or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the use of the SCREEN 3.0 (or other approved) model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as required in Engineering Guide #70. The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: methylene chloride

TLV (mg/m<sup>3</sup>): 173.61

Maximum Hourly Emission Rate (lbs/hr): 20.22\*

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 2910.0

MAGLC (ug/m<sup>3</sup>): 4133.6

Pollutant: trichloroethylene  
TLV (mg/m3): 268.6  
Maximum Hourly Emission Rate (lbs/hr): 7.1  
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 2069.2  
MAGLC (ug/m3): 6395.3

\*Combined emission rate for R001 and R002.

4. 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 or the use of new materials, that would result in the emission of a compound or chemical with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled, as documented in the most current version of the American Conference of Governmental Industrial Hygienists' (ACGIH's) handbook entitled "TLVs and BEIs" ("Threshold Limit Values for Chemical Substances and Physical Agents, Biological Exposure Indices");
  - 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.).
5. 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) meet(s) the definition of a "modification" under other provisions of the rule, then the permittee shall obtain a final permit to install prior to the change.

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

#### **D. Reporting Requirements**

1. The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the rolling, 12-month chemicals usage rate limitations as specified in section B.2 of this permit. These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.
2. The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the rolling, 12-month net chemicals usage rate limitations as specified in section B.3 of this permit. These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.
3. The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the rolling, 12-month emission limitations for VOC and OC of 21.66 tons and 31.61 tons, respectively (for emissions units R001, R002, and R003, combined). These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.
4. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month emission limitations for any individual HAP and total combined HAPs of 9.95 tons and 24.9 tons, respectively (from the entire facility). These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.
5. The permittee shall notify the Director (the ARAQMD) in writing if any photochemically reactive material (as defined in OAC rule 3745-21-01(C)(5)) was employed in applicators BNYA-001, BNYA-002, and BNYA-003. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA or local air agency) within 45 days after such an occurrence.
6. The permittee shall submit annual reports that specify the total VOC and OC emissions from R001, R002, and R003, combined, and the total amount of each chemical

employed for emissions units R001, R002, and R003, combined, for the previous calendar year. These reports shall be submitted by January 31 of each year.

## **E. Testing Requirements**

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

- a. Emission Limitations:

The emissions of VOC from each of the following applicators: BAA-003, BAA-004, BAA-005, BAA-006, BAA-007, BAA-008, BAA-009, and BAA-010 shall not exceed 0.82 pound per hour.

The emissions of VOC from each of the following applicators: BEA-001, BEA-002, and BEA-003 shall not exceed 0.53 pound per hour.

The emissions of VOC from applicator BEA-004 shall not exceed 1.51 pounds per hour.

The emissions of VOC from each of the following applicators: BNYA-001, BNYA-002, and BNYA-003 shall not exceed 2.04 pounds per hour.

The emissions of OC from applicator BTA-001 shall not exceed 1.02 pounds per hour.

The emissions of VOC from each of the following applicators: BAA-001 and BAA-002 shall not exceed 0.27 pound per hour.

Applicable Compliance Method:

Compliance with the hourly allowable VOC or OC emission limitations above shall be demonstrated by multiplying worst-case VOC or OC content (in pounds per gallon) by the maximum hourly usage rate (in gallons).

If required and technically feasible, the permittee shall demonstrate compliance with the hourly allowable VOC and OC emission limitations based on the results of emission testing conducted in accordance with Methods 18, 25, or 25A, as appropriate, of 40 CFR Part 60, Appendix A.

- b. Emission Limitations:

The emissions of OC from emissions units R001, R002, and R003, combined, shall not exceed 31.61 tons per year, based upon a rolling, 12-month summation of the monthly emissions.

The emissions of VOC from emissions units R001, R002, and R003, combined, shall not exceed 21.66 tons per year, based upon a rolling, 12-month summation of the monthly emissions.

Applicable Compliance Method:

Compliance with the annual allowable VOC and OC emission limitations above shall be demonstrated through the record keeping requirements established in section C.2 of this permit.

c. Emission Limitations:

The VOC content of each chemical employed shall not exceed 4.15 pounds of VOC per gallon of chemical 3, 7.05 pounds of VOC per gallon of chemical 4, 6.76 pounds of VOC per gallon of chemical 5, 6.77 pounds of VOC per gallon of chemical 8, 0.0 pound of VOC per gallon of chemical 10, 2.79 pounds of VOC per gallon of chemical 12, 3.31 pounds of VOC per gallon of chemical 13, 7.83 pounds of VOC per gallon of chemical 14, and 7.93 pounds of VOC per gallon of chemical 15.

Applicable Compliance Method:

Compliance with the allowable VOC content limitations above shall be demonstrated through the record keeping requirements established in section C.2 of this permit.

Formulation data or USEPA Method 24 (for coatings) or 24A (for flexographic and rotogravure printing inks and related coatings) shall be used to determine the VOC contents of each chemical.

d. Emission Limitations:

The emissions of any individual HAP from the entire facility shall not exceed 9.95 tons per year, based upon a rolling, 12-month summation of the monthly emissions.

The emissions of the total combined HAPs from the entire facility shall not exceed 24.9 tons per year, based upon a rolling, 12-month summation of the monthly emissions.

Applicable Compliance Method:

Compliance with the annual allowable HAP emission limitations above shall be demonstrated through the record keeping requirements established in section C.2 of this permit.

e. Usage Limitations:

The maximum annual chemical 5, chemical 8, chemical 10, chemical 12, chemical 13, chemical 14, and chemical 15 usage rates (for emissions units R001 and R002, and R003, combined) shall not exceed 338 gallons, 1238 gallons, 4077 gallons, 1993 gallons, 745 gallons, 125 gallons, and 500 gallons, respectively, based upon rolling, 12-month summations of the monthly chemicals usage rates.

The maximum annual net chemical 3 and chemical 4 usage rates for emissions units R001 and R002, and R003, combined, shall not exceed 326 gallons and 2604 gallons, respectively, based upon rolling, 12-month summations of the net\* monthly chemicals usage rates.

Applicable Compliance Method:

Compliance with the annual allowable chemicals usage rate limitations and the annual allowable net chemicals usage rate limitations above shall be demonstrated through the record keeping requirements established in section C.2 of this permit.

**F. Miscellaneous Requirements**

1. All the terms and conditions of this permit are federally enforceable, except for Sections C.3, C.4 and C5.

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

**A. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
<p>R002 - Process 04 - PreCoat Operations (see Table 4. Process 04 - PreCoat Operations Emissions Units) (the terms and conditions in this permit supercede the terms and conditions in PTI 16-1088 issued 4/14/1993).</p>	<p>OAC rule 3745-31-05(A)(3)</p>	<p>The emissions of organic compounds (OC)** from each of the following applicators: PTA-001 and PTA-002 shall not exceed 3.95 pounds per hour.</p> <p>The emissions of OC** from each of the following applicators: PTA-003 and PTA-004 shall not exceed 3.90 pounds per hour.</p> <p>The emissions of OC** from applicator PTA-005 shall not exceed 3.58 pounds per hour.</p> <p>The emissions of volatile organic compounds (VOC)* from applicator PNYA-001 shall not exceed 2.42 pounds per hour.</p> <p>The emissions of VOC* from applicator PEA-001 shall not exceed 1.36 pounds per hour.</p> <p>The emissions of OC** from emissions units R001, R002, and R003, combined, shall not exceed 31.61 tons per year, based upon a rolling, 12-month summation of the monthly emissions.</p>

OAC rule 3745-35-07(B)(1)  
(synthetic minor to avoid Title V,  
nonattainment NSR and MACT  
requirements)

The emissions of VOC\* from emissions units R001, R002, and R003, combined, shall not exceed 21.66 tons per year, based upon a rolling, 12-month summation of the monthly emissions.

The VOC content of each chemical purchased shall not exceed 4.15 pounds of VOC per gallon of chemical 3, 7.05 pounds of VOC per gallon of chemical 4, 6.76 pounds of VOC per gallon of chemical 5, 6.77 pounds of VOC per gallon of chemical 8, 0.0 pound of VOC per gallon of chemical 10, 2.79 pounds of VOC per gallon of chemical 12, 3.31 pounds of VOC per gallon of chemical 13, 7.83 pounds of VOC per gallon of chemical 14, and 7.93 pounds of VOC per gallon of chemical 15\*\*\*.

See B.2 below.

The emissions of any individual hazardous air pollutant (HAP) from the entire facility (i.e., emissions units R001, R002, R003, and permit to install exempt and "de minimis" emissions units, combined) shall not exceed 9.95 tons per year, based upon a rolling, 12-month summation of the monthly emissions.

The emissions of total combined HAPs from the entire facility (i.e., emissions units R001, R002, R003, and permit to install exempt and "de minimis" emissions units, combined) shall not exceed 24.9 tons per year, based upon a

OAC rule 3745-21-07(G)

rolling, 12-month summation of the monthly emissions

For applicator PEA-001, the emission limitations specified by this rule are less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

For the following applicators: PTA-001, PTA-002, PTA-003, PTA-004, PTA-005, and PNYA-001, see B.1 below.

\*All OC emitted from applicators PNYA-001 and PEA-001 are considered to be VOC.

\*\*OC emitted from applicators PTA-001, PTA-002, PTA-003, PTA-004, and PTA-005 are not considered to be VOC.

\*\*\*The pound(s) of VOC per gallon limitations are 2% higher than the VOC content supplied by the material manufacturer in order to account for inherent fluctuations in actual material formulation.

## 2. Additional Terms and Conditions

- 2.a** The hourly VOC and OC emission limitations are based on each applicator's potential to emit. Therefore, no monitoring, record keeping or reporting is or will be required to demonstrate compliance with these emission limitations. Such requirements would be impractical and unreasonable given the nature of this emissions unit.
- 2.b** For all chemical usage limitations, monitoring, record keeping, and reporting requirements that deal with chemical usage in this permit, the total quantity of chemical used/employed in this emissions unit during any rolling 12-month period is considered to be equivalent to the total quantity of chemical purchased and received during that rolling 12-month period, except that any quantity of chemical

that can be shown to have been returned, rejected, or disposed after having been received shall not be considered to have been used.

## **B. Operational Restrictions**

1. The permittee shall not employ any liquid organic material in applicators PTA-001, PTA-002, PTA-003, PTA-004, PTA-005, and PNYA-001 that is a photochemically reactive material. "Photochemically reactive material" is defined in OAC rule 3745-21-01(C)(5).
2. The maximum annual chemical 5, chemical 8, chemical 10, chemical 12, chemical 13, chemical 14, and chemical 15 usage rates (for emissions units R001 and R002, and R003, combined) shall not exceed 338 gallons, 1238 gallons, 4077 gallons, 1993 gallons, 745 gallons, 125 gallons, and 500 gallons, respectively, based upon rolling, 12-month summations of the monthly chemicals usage rates.
3. The maximum annual net chemical 3 and chemical 4 usage rates (for emissions units R001 and R002, and R003, combined) shall not exceed 326 gallons and 2604 gallons, respectively, based upon rolling, 12-month summations of the net\* monthly chemicals usage rates.

[Emissions units R001, R002, and R003 have been in operation for more than 12 months and, as such, the permittee has existing records to generate the rolling, 12-month summation of the chemicals usage rates and the net chemicals usage rates upon issuance of this permit.]

\*The net chemicals usage rate is defined as the amount of chemicals used minus the amount of chemicals returned, rejected or disposed of as waste. In addition, it is assumed that the amount of chemicals purchased is equivalent to the amount of chemicals used/employed.

## **C. Monitoring and/or Recordkeeping Requirements**

1. The permittee shall maintain monthly records of the following information for applicators PTA-001, PTA-002, PTA-003, PTA-004, PTA-005, and PNYA-001:
  - a. the identification of each liquid organic material employed; and
  - b. documentation as to whether or not each liquid organic material employed is a photochemically reactive material, as defined by OAC rule 3745-21-01(C)(5).
2. The permittee shall maintain monthly records of the following information for emissions units R001, R002, and R003, combined:
  - a. the company identification of each chemical employed;

- b. the VOC content of each chemical employed\*, in pounds of VOC per gallon of chemical;
- c. the OC content of each chemical employed, in pounds of OC per gallon of chemical;
- d. the individual HAP<sup>1</sup> content for each HAP of each chemical employed, in pounds of individual HAP per gallon of chemical;
- e. the total number of gallons of each chemical employed;
- f. the total number of gallons of chemical 3 and chemical 4 returned, rejected, or disposed of as waste;
- g. the rolling, 12-month chemicals usage rates for each chemical\*\*, in gallons;
- h. the rolling, 12-month net chemicals usage rates for chemical 3 and chemical 4, in gallons;
- i. the amount of waste removed from the facility for emissions units R001, R002, and R003, combined, in pounds;
- j. the VOC content of the waste removed, in pounds of VOC per pound of waste;
- k. the OC content of the waste removed, in pounds of OC per pound of waste;
- l. the individual HAP content for each HAP of the waste removed, in pound of individual HAP per pound of waste;
- m. the VOC emissions, in tons (i.e., the sum of (b) times (e) for each chemical minus (i) times (j) for all waste removed, and then divide by 2000);
- n. the OC emissions, in tons (i.e., the sum of (c) times (e) for each chemical minus (i) times (k) for all waste removed, and then divide by 2000);
- o. the total individual HAP emissions for each HAP from all the chemicals employed, in tons per month (i.e., for each HAP the sum of (d) times (e) for each chemical minus (i) times (l) for all waste removed plus (x)\*\*\*/12, and then divide by 2000);
- p. the total combined HAPs emissions from all the chemicals employed, in tons per month (i.e., the sum of the total individual HAP emissions in (o)); and
- q. the rolling, 12-month VOC, OC, each individual HAP, and total combined HAPs emissions, in tons.

<sup>1</sup>A listing of the HAPs can be found in Section 112(b) of the Clean Air Act or can be obtained by contacting your Ohio EPA field office or local air agency contact. Material Safety Data Sheets typically include a listing of the solvents contained in the coatings or cleanup materials. This information does not have to be kept on a line-by-line basis.

\* The amount of chemicals purchased per rolling 12-month period (excluding any chemicals returned or rejected during that period) is considered to be equal to the amount of chemicals employed/used in that rolling 12-month period.

\*\* This record does not need kept for chemical 3 and chemical 4.

\*\*\* "x" is the potential to emit of each individual HAP for all permit to install exempt and "de minimis" emissions units in tons per year.

3. The permit to install for this emissions unit R002 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 to this emissions unit for each toxic pollutant listed in OAC rule 3745-114-01, using data from the permit to install application, and modeling was performed for the toxic pollutant(s) emitted at over a ton per year using the SCREEN 3.0 model or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the use of the SCREEN 3.0 (or other approved) model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as required in Engineering Guide #70. The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: methylene chloride

TLV (mg/m<sup>3</sup>): 173.61

Maximum Hourly Emission Rate (lbs/hr): 20.22\*

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 2910.0

MAGLC (ug/m<sup>3</sup>): 4133.6

\*Combined emission rate for R001 and R002.

4. 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 or the use of new materials, that would result in the emission of a compound or chemical with a lower

Threshold Limit Value (TLV) than the lowest TLV previously modeled, as documented in the most current version of the American Conference of Governmental Industrial Hygienists' (ACGIH's) handbook entitled "TLVs and BEIs" ("Threshold Limit Values for Chemical Substances and Physical Agents, Biological Exposure Indices");

- 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.).
5. 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) meet(s) the definition of a "modification" under other provisions of the rule, then the permittee shall obtain a final permit to install prior to the change.

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

#### **D. Reporting Requirements**

- 1. The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the rolling, 12-month chemicals usage rate limitations as specified in section B.2 of this permit. These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

2. The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the rolling, 12-month net chemicals usage rate limitations as specified in section B.3 of this permit. These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.
3. The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the rolling, 12-month emission limitations for VOC and OC of 21.66 tons and 31.61 tons, respectively (for emissions units R001, R002, and R003, combined). These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.
4. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month emission limitations for any individual HAP and total combined HAPs of 9.95 tons and 24.9 tons, respectively (from the entire facility). These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.
5. The permittee shall notify the Director (the ARAQMD) in writing if a photochemically reactive material (as defined in OAC rule 3745-21-01(C)(5)) was employed in applicators PTA-001, PTA-002, PTA-003, PTA-004, PTA-005, and PNYA-001. The notification shall include a copy of such record and shall be sent to the Director (the ARAQMD) within 45 days after such an occurrence.
6. The permittee shall submit annual reports that specify the total VOC and OC emissions from R001, R002, and R003, combined, and the total amount of each chemical employed for emissions units R001, R002, and R003, combined, for the previous calendar year. These reports shall be submitted by January 31 of each year.

## **E. Testing Requirements**

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

- a. Emission Limitations:

The emissions of OC from each of the following applicators: PTA-001 and PTA-002 shall not exceed 3.95 pounds per hour.

The emissions of OC from each of the following applicators: PTA-003 and PTA-004 shall not exceed 3.90 pounds per hour.

The emissions of OC from applicator PTA-005 shall not exceed 3.58 pounds per hour.

The emissions of VOC from applicator PNYA-001 shall not exceed 2.42 pounds per hour.

The emissions of VOC from applicator PEA-001 shall not exceed 1.36 pounds per hour.

Applicable Compliance Method:

Compliance with the hourly allowable VOC or OC emission limitations above shall be demonstrated by multiplying worst-case VOC or OC content (in pounds per gallon) by the maximum hourly usage rate (in gallons).

If required and technically feasible, the permittee shall demonstrate compliance with the hourly allowable VOC and OC emission limitations based on the results of emission testing conducted in accordance with Methods 18, 25, or 25A, as appropriate, of 40 CFR Part 60, Appendix A.

b. Emission Limitations:

The emissions of OC from emissions units R001, R002, and R003, combined, shall not exceed 31.61 tons per year, based upon a rolling, 12-month summation of the monthly emissions.

The emissions of VOC from emissions units R001, R002, and R003, combined, shall not exceed 21.66 tons per year, based upon a rolling, 12-month summation of the monthly emissions.

Applicable Compliance Method:

Compliance with the annual allowable VOC and OC emission limitations above shall be demonstrated through the record keeping requirements established in section C.2 of this permit.

c. Emission Limitations:

The VOC content of each chemical purchased shall not exceed 4.15 pounds of VOC per gallon of chemical 3, 7.05 pounds of VOC per gallon of chemical 4, 6.76 pounds of VOC per gallon of chemical 5, 6.77 pounds of VOC per gallon of chemical 8, 0.0 pound of VOC per gallon of chemical 10, 2.79 pounds of VOC per gallon of chemical 12, 3.31 pounds of VOC per gallon of chemical 13, 7.83 pounds of VOC per gallon of chemical 14, and 7.93 pounds of VOC per gallon of chemical 15.

Applicable Compliance Method:

Compliance with the allowable VOC content limitations above shall be demonstrated through the record keeping requirements established in section C.2 of this permit.

Formulation data or USEPA Method 24 (for coatings) or 24A (for flexographic and rotogravure printing inks and related coatings) shall be used to determine the VOC contents of each chemical.

d. Emission Limitations:

The emissions of any individual HAP from the entire facility shall not exceed 9.95 tons per year, based upon a rolling, 12-month summation of the monthly emissions.

The emissions of the total combined HAPs from the entire facility shall not exceed 24.9 tons per year, based upon a rolling, 12-month summation of the monthly emissions.

Applicable Compliance Method:

Compliance with the annual allowable HAP emission limitations above shall be demonstrated through the record keeping requirements established in section C.2 of this permit.

e. Usage Limitations:

The maximum annual chemical 5, chemical 8, chemical 10, chemical 12, chemical 13, chemical 14, and chemical 15 usage rates (for emissions units R001 and R002, and R003, combined) shall not exceed 338 gallons, 1238 gallons, 4077 gallons, 1993 gallons, 745 gallons, 125 gallons, and 500 gallons, respectively, based upon rolling, 12-month summations of the monthly chemicals usage rates.

The maximum annual net chemical 3 and chemical 4 usage rates for emissions units R001 and R002, and R003, combined, shall not exceed 326 gallons and 2604 gallons, respectively, based upon rolling, 12-month summations of the net\* monthly chemicals usage rates.

Applicable Compliance Method:

Compliance with the annual allowable chemicals usage rate limitations and the annual allowable net chemicals usage rate limitations above shall be demonstrated through the record keeping requirements established in section C.2 of this permit.

**F. Miscellaneous Requirements**

1. The terms and conditions in this permit to install 16-02466 shall supercede all the air pollution control requirements for applicators PTA-004 and PTA-005 in permit to install 16-1088.
2. All the terms and conditions of this permit are federally enforceable, except for Sections C.3, C.4 and C5.



per gallon of chemical 12, 3.31 pounds of VOC per gallon of chemical 13, 7.83 pounds of VOC per gallon of chemical 14, and 7.93 pounds of VOC per gallon of chemical 15\*\*.

See B.2 below.

The emissions of any individual hazardous air pollutant (HAP) from the entire facility (i.e., emissions units R001, R002, R003, and permit to install exempt and "de minimis" emissions units, combined) shall not exceed 9.95 tons per year, based upon a rolling, 12-month summation of the monthly emissions.

The emissions of total combined HAPs from the entire facility (i.e., emissions units R001, R002, R003, and permit to install exempt and "de minimis" emissions units, combined) shall not exceed 24.9 tons per year, based upon a rolling, 12-month summation of the monthly emissions

OAC rule 3745-21-07(G)

For each printing operation installed on or after January 1, 1974, the emission limitations specified by this rule are less stringent than the emission limitations established pursuant to OAC rule 3745-31-05(A)(3).

For printing operation number 611 and printing operation number K-304, a person shall not discharge more than forty pounds of organic material into the atmosphere in any one day, nor more than eight pounds in any one hour, from any

article, machine, equipment, or other contrivance for employing, applying, evaporating or drying any photochemically reactive material, or substance containing such photochemically reactive material.

\*All organic compounds (OC) emitted from this emissions unit are considered to be VOC.

\*\*The pound(s) of VOC per gallon limitations are 2% higher than the VOC content supplied by the material manufacturer in order to account for inherent fluctuations in actual material formulation.

## **2. Additional Terms and Conditions**

- 2.a** The hourly VOC emission limitations are based on each printing operation's potential to emit. Therefore, no monitoring, record keeping or reporting is or will be required to demonstrate compliance with these emission limitations. Such requirements would be impractical and unreasonable given the nature of this emissions unit.
- 2.b** For all chemical usage limitations, monitoring, record keeping, and reporting requirements that deal with chemical usage in this permit, the total quantity of chemical used/employed in this emissions unit during any rolling 12-month period is considered to be equivalent to the total quantity of chemical purchased and received during that rolling 12-month period, except that any quantity of chemical that can be shown to have been returned, rejected, or disposed after having been received shall not be considered to have been used.

## **B. Operational Restrictions**

1. The permittee shall not employ any cleanup material in this emissions unit that is considered a photochemically reactive material. "Photochemically reactive material" is defined in OAC rule 3745-21-01(C)(5).
2. The maximum annual chemical 5, chemical 8, chemical 10, chemical 12, chemical 13, chemical 14, and chemical 15 usage rates (for emissions units R001 and R002, and R003, combined) shall not exceed 338 gallons, 1238 gallons, 4077 gallons, 1993

gallons, 745 gallons, 125 gallons, and 500 gallons, respectively, based upon rolling, 12-month summations of the monthly chemicals usage rates.

3. The maximum annual net chemical 3 and chemical 4 usage rates for emissions units R001 and R002, and R003, combined, shall not exceed 326 gallons and 2604 gallons, respectively, based upon rolling, 12-month summations of the net\* monthly chemicals usage rates.

[Emissions units R001, R002, and R003 have been in operation for more than 12 months and, as such, the permittee has existing records to generate the rolling, 12-month summation of the chemicals usage rates and the net chemicals usage rates upon issuance of this permit.]

\*The net chemicals usage rate is defined as the amount of chemicals used minus the amount of chemicals returned, rejected or disposed of as waste. In addition, it is assumed that the amount of chemicals purchased is equivalent to the amount of chemicals used/employed.

### **C. Monitoring and/or Recordkeeping Requirements**

1. The permittee shall maintain monthly records of the following information for this emissions unit:
  - a. the identification of each cleanup material employed; and
  - b. documentation as to whether or not each cleanup material employed is a photochemically reactive material, as defined by OAC rule 3745-21-01(C)(5).
2. The permittee shall maintain monthly records of the following information for emissions units R001, R002, and R003, combined:
  - a. the company identification of each chemical employed;
  - b. the VOC content of each chemical employed\*, in pounds of VOC per gallon of chemical;
  - c. the OC content of each chemical employed, in pounds of OC per gallon of chemical;
  - d. the individual HAP<sup>1</sup> content for each HAP of each chemical employed, in pounds of individual HAP per gallon of chemical;
  - e. the total number of gallons of each chemical employed;

- f. the total number of gallons of chemical 3 and chemical 4 returned, rejected, or disposed of as waste;
- g. the rolling, 12-month chemicals usage rates for each chemical\*\*, in gallons;
- h. the rolling, 12-month net chemicals usage rates for chemical 3 and chemical 4, in gallons;
- i. the amount of waste removed from the facility for emissions units R001, R002, and R003, combined, in pounds;
- j. the VOC content of the waste removed, in pounds of VOC per pound of waste;
- k. the OC content of the waste removed, in pounds of OC per pound of waste;
- l. the individual HAP content for each HAP of the waste removed, in pound of individual HAP per pound of waste;
- m. the VOC emissions, in tons (i.e., the sum of (b) times (e) for each chemical minus (i) times (j) for all waste removed, and then divide by 2000);
- n. the OC emissions, in tons (i.e., the sum of (c) times (e) for each chemical minus (i) times (k) for all waste removed, and then divide by 2000);
- o. the total individual HAP emissions for each HAP from all the chemicals employed, in tons per month (i.e., for each HAP the sum of (d) times (e) for each chemical minus (i) times (l) for all waste removed plus (x)\*\*\*/12, and then divide by 2000);
- p. the total combined HAPs emissions from all the chemicals employed, in tons per month (i.e., the sum of the total individual HAP emissions in (o)); and
- q. the rolling, 12-month VOC, OC, each individual HAP, and total combined HAPs emissions, in tons.

<sup>1</sup>A listing of the HAPs can be found in Section 112(b) of the Clean Air Act or can be obtained by contacting your Ohio EPA field office or local air agency contact. Material Safety Data Sheets typically include a listing of the solvents contained in the coatings or cleanup materials. This information does not have to be kept on a line-by-line basis.

\* The amount of chemicals purchased per rolling 12-month period (excluding any chemicals returned or rejected during that period) is considered to be equal to the amount of chemicals employed/used in that rolling 12-month period.

\*\* This record does not need kept for chemical 3 and chemical 4.

\*\*\* "x" is the potential to emit of each individual HAP for all permit to install exempt and "de minimis" emissions units in tons per year.

#### **D. Reporting Requirements**

1. The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the rolling, 12-month chemicals usage rate limitations as specified in section B.2 of this permit. These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.
2. The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the rolling, 12-month net chemicals usage rate limitations as specified in section B.3 of this permit. These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.
3. The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the rolling, 12-month emission limitations for VOC and OC of 21.66 tons and 31.61 tons, respectively (for emissions units R001, R002, and R003, combined). These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.
4. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month emission limitations for any individual HAP and total combined HAPs of 9.95 tons and 24.9 tons, respectively (from the entire facility). These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.
5. The permittee shall notify the Director (the ARAQMD) in writing if a photochemically reactive cleanup material (as defined in OAC rule 3745-21-01(C)(5)) is employed in this emissions unit. The notification shall include a copy of such record and shall be sent to the Director (the ARAQMD) within 45 days after such an occurrence.
6. The permittee shall submit annual reports that specify the total VOC and OC emissions from R001, R002, and R003, combined, and the total amount of each chemical employed for emissions units R001, R002, and R003, combined, for the previous calendar year. These reports shall be submitted by January 31 of each year.

#### **E. Testing Requirements**

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

a. Emission Limitations:

The emissions of VOC from each printing operation installed on or after January 1, 1974 shall not exceed 0.05 pound per hour for inks and thinners.

Applicable Compliance Method:

Compliance with the hourly allowable VOC emission limitation above shall be demonstrated by multiplying worst-case VOC content (in pounds per gallon) by the maximum hourly ink usage rate (in gallons) plus the worst-case VOC content (in pounds per gallon) times the maximum hourly thinner usage rate (in gallons).

If required and technically feasible, the permittee shall demonstrate compliance with the hourly allowable VOC emission limitations based on the results of emission testing conducted in accordance with Methods 18, 25, or 25A, as appropriate, of 40 CFR Part 60, Appendix A.

b. Emission Limitations:

For printing operation number 611 and printing operation number K-304, the permittee shall not discharge more than forty pounds of organic material into the atmosphere in any one day, nor more than eight pounds in any one hour, from any article, machine, equipment, or other contrivance for employing, applying, evaporating or drying any photochemically reactive material, or substance containing such photochemically reactive material.

Applicable Compliance Method:

Compliance with the hourly and daily OC emission limitations shall be assumed because the hourly and daily emission limitations specified above are greater than the potentials to emit for each printing operation.

If required and technically feasible, the permittee shall demonstrate compliance with the hourly allowable VOC emission limitations based on the results of emission testing conducted in accordance with Methods 18, 25, or 25A, as appropriate, of 40 CFR Part 60, Appendix A.

c. Emission Limitations:

The emissions of OC from emissions units R001, R002, and R003, combined, shall not exceed 31.61 tons per year, based upon a rolling, 12-month summation of the monthly emissions.

The emissions of VOC from emissions units R001, R002, and R003, combined, shall not exceed 21.66 tons per year, based upon a rolling, 12-month summation of the monthly emissions.

Applicable Compliance Method:

Compliance with the annual allowable VOC and OC emission limitations above shall be demonstrated through the record keeping requirements established in section C.2 of this permit.

d. Emission Limitations:

The VOC content of each chemical purchased shall not exceed 4.15 pounds of VOC per gallon of chemical 3, 7.05 pounds of VOC per gallon of chemical 4, 6.76 pounds of VOC per gallon of chemical 5, 6.77 pounds of VOC per gallon of chemical 8, 0.0 pound of VOC per gallon of chemical 10, 2.79 pounds of VOC per gallon of chemical 12, 3.31 pounds of VOC per gallon of chemical 13, 7.83 pounds of VOC per gallon of chemical 14, and 7.93 pounds of VOC per gallon of chemical 15.

Applicable Compliance Method:

Compliance with the allowable VOC content limitations above shall be demonstrated through the record keeping requirements established in section C.2 of this permit.

Formulation data or USEPA Method 24 (for coatings) or 24A (for flexographic and rotogravure printing inks and related coatings) shall be used to determine the VOC contents of each chemical.

e. Emission Limitations:

The emissions of any individual HAP from the entire facility shall not exceed 9.95 tons per year, based upon a rolling, 12-month summation of the monthly emissions.

The emissions of the total combined HAPs from the entire facility shall not exceed 24.9 tons per year, based upon a rolling, 12-month summation of the monthly emissions.

Applicable Compliance Method:

Compliance with the annual allowable HAP emission limitations above shall be demonstrated through the record keeping requirements established in section C.2 of this permit.

f. Usage Limitations:

The maximum annual chemical 5, chemical 8, chemical 10, chemical 12, chemical 13, chemical 14, and chemical 15 usage rates (for emissions units R001 and R002, and R003, combined) shall not exceed 338 gallons, 1238 gallons, 4077 gallons, 1993 gallons, 745 gallons, 125 gallons, and 500 gallons, respectively, based upon rolling, 12-month summations of the monthly chemicals usage rates.

The maximum annual net chemical 3 and chemical 4 usage rates for emissions units R001 and R002, and R003, combined, shall not exceed 326 gallons and 2604 gallons, respectively, based upon rolling, 12-month summations of the net\* monthly chemicals usage rates.

Applicable Compliance Method:

Compliance with the annual allowable chemicals usage rate limitations and the annual allowable net chemicals usage rate limitations above shall be demonstrated through the record keeping requirements established in section C.2 of this permit.

**F. Miscellaneous Requirements**

1. Modeling to demonstrate compliance with the Ohio EPA's "Air Toxic Policy" was not necessary because the emissions unit's maximum annual emissions for each toxic pollutant listed in OAC rule 3745-114-01 will be less than 1.0 ton. OAC Chapter 3745-31 requires a permittee to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that a new permit to install application would be required for an emissions unit if changes in the composition of the materials or use of new materials would cause the emissions of any pollutant listed in OAC rule 3745-114-01 that has a listed Threshold Limit Value (TLV), as documented in the most current version of the American Conference of Governmental Industrial Hygienists' (ACGIH's) handbook entitled "TLVs and BEIs" ("Threshold Limit Values for Chemical Substances and Physical Agents, Biological Exposure Indices"), to increase to above 1.0 ton per year.
2. All the terms and conditions of this permit are federally enforceable.

**Table 1. Process 01 - Plasticized Nylon Air Extrusion Operations Emissions Units**

<b>Extruder Number</b>	<b>Equipment Description</b>	<b>Serial Number</b>	<b>Date of Installation</b>	<b>Maximum Designed Plasticized nylon resin throughput lbs/hr</b>
J-727	2-1/2" Extruder	16673	1975	90
K-326	2-1/2" Extruder	16869	1979	90
J-997	3-1/2" Extruder	17183	1979	180
L-810	2-1/2" Extruder	17644	1980	95
L-809	3-1/2" Extruder	17489	1981	198
EX177	3-1/2" Extruder	19203	1995	165
EX244	3-1/2" Extruder	96350	1996	130
EXTDR-003	3-1/2" Extruder	19328	1998	140
EXTDR-001	3-1/2" Extruder	19327	1998	151
EXTDR-017	3-1/2" Extruder	19355	1999	180
EXTDR-005	3-1/2" Extruder	AW176	1999	198
EXTDR-006	3-1/2" Extruder	19417	2000	135
EXTDR-016	3-1/2" Extruder	19464	2001	176
EXTDR-007	2" Extruder	Z9220	2001	80
EXTDR-014	3-1/2" Extruder	19445	2001	86

EXTDR-018	3-1/2" Extruder	2358	2004	198
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**Table 2. Process 02 - Tube Conditioning Operations Emissions Units**

<b>Applicator Number</b>	<b>Date of Installation</b>	<b>Maximum Material Usage Rate (gallon/hour)</b>
TCM-001	1973	0.472
TCM-002	1974	0.366
TCM-003	1974	0.181
TCM-004	1976	0.181
TCM-005	2002	0.181
TCM-006	2002	0.678

**Table 3. Process 03 - Reinforcement Operations Emissions Units**

<b>Applicator Number</b>	<b>Date of Installation</b>	<b>Maximum Material Usage Rate (gallon/hour)</b>
BAA-003	2002	0.121
BAA-004	2002	0.121
BAA-005	2002	0.121
BAA-006	2002	0.121
BAA-007	2005	0.121
BAA-008	2005	0.121
BAA-009	2005	0.121
BAA-010	2005	0.121
BEA-001	1978	0.145
BEA-002	1979	0.145
BEA-003	1982	0.145
BEA-004	2002	0.417
BNYA-001	2002	0.73

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**Emissions Unit ID: R003**

BNYA-002	2002	0.73
BNYA-003	2002	0.73
BTA-001	2002	0.206
BAA-001	2002	0.041
BAA-002	2002	0.041

**Table 4. Process 04 - PreCoat Operations Emissions Units**

<b>Applicator Number</b>	<b>Date of Installation</b>	<b>Maximum Material Usage Rate (gallon/hour)</b>
PTA-001	1974	0.807
PTA-002	1979	0.807
PTA-003	1979	0.798
PTA-004	1982	0.798
PTA-005	1982	0.732
PNYA-001	2002	0.73
PEA-001	1974	0.374

**Table 5. Process 05 - Offset Printing Operations Emissions Units**

<b>Printer Number</b>	<b>Equipment Description</b>	<b>Serial Number</b>	<b>Date of Installation</b>	<b>Maximum Material Usage Rate (gallon/hour)</b>
H-611	Matthews offset printer	DC-73-D	1973	0.006
P-573	Matthews offset printer	C-83-D	1983	0.006
H-678	Matthews offset printer	A-79-C	1979	0.006
M-348	Matthews offset printer	E-79-D	1979	0.006
K-325	Matthews offset printer	J-77-C	1977	0.006
K-376	Matthews offset printer	F-78	1978	0.006
PRINT-010	Matthews offset printer	Oct-98	1998	0.006
PRINT-011	Matthews offset printer	Oct-98	1998	0.006

PRINT-012	Matthews offset printer	May-99	1999	0.006
PRINT-013	Matthews offset printer	May-99	1999	0.006
PRINT-014	Matthews offset printer	Nov-99	1999	0.006
PRINT-015	Matthews offset printer	Nov-99	1999	0.006
PRINT-039	Matthews offset printer	Jan-02	2002	0.006
	Matthews offset printer	Jan-02	2002	0.006
PRINT-040	Matthews offset printer	Jun-04	2004	0.006
	Matthews offset printer	Jun-04	2004	0.006
M-362	Matthews offset printer	D-81-C	1981	0.006
K-304	Matthews offset printer	R-6025	Unknown	0.006
K-350	Matthews offset printer	E-79-D	1979	0.006
K-364	Matthews offset printer	E-76-A	1976	0.006
K-377	Matthews offset printer	A-77-C	1977	0.006
J-733	Matthews offset printer	K-84	1984	0.006
P-574	Matthews offset printer	H-83-D	1983	0.006
PRINT-001	Matthews offset printer	Feb-98	1998	0.006
PRINT-009	Matthews offset printer	Jan-98	1998	0.006