



Environmental Protection Agency

John R. Kasich, Governor
Mary Taylor, Lt. Governor
Scott J. Nally, Director

3/5/2012

Mr. Rich Buda
Eaton Corp Aurora
115 Lena Drive
Aurora, OH 44202

RE: DRAFT AIR POLLUTION PERMIT-TO-INSTALL AND OPERATE

Facility ID: 1667020046
Permit Number: P0109151
Permit Type: Initial Installation
County: Portage

Certified Mail

No	TOXIC REVIEW
No	PSD
No	SYNTHETIC MINOR TO AVOID MAJOR NSR
No	CEMS
No	MACT/GACT
No	NSPS
No	NESHAPS
No	NETTING
No	MAJOR NON-ATTAINMENT
Yes	MODELING SUBMITTED
Yes	SYNTHETIC MINOR TO AVOID TITLE V
Yes	FEDERALLY ENFORCABLE PTIO (FEPTIO)

Dear Permit Holder:

A draft of the Ohio Administrative Code (OAC) Chapter 3745-31 Air Pollution Permit-to-Install and Operate (PTIO) for the referenced facility has been issued for the emissions unit(s) listed in the Authorization section of the enclosed draft permit. This draft action is not an authorization to begin construction or modification of your emissions unit(s). The purpose of this draft is to solicit public comments on the permit. A public notice will appear in the Ohio EPA Weekly Review and the local newspaper, The Record Courier. A copy of the public notice and the draft permit are enclosed. This permit can be accessed electronically on the Division of Air Pollution Control (DAPC) Web page, www.epa.ohio.gov/dapc by clicking the "Issued Air Pollution Control Permits" link. Comments will be accepted as a marked-up copy of the draft permit or in narrative format. Any comments must be sent to the following:

Andrew Hall
Permit Review/Development Section
Ohio EPA, DAPC
122 South Front Street
Columbus, Ohio 43215

and Akron Regional Air Quality Management District
146 South High Street, Room 904
Akron, OH 44308

Comments and/or a request for a public hearing will be accepted within 30 days of the date the notice is published in the newspaper. You will be notified in writing if a public hearing is scheduled. A decision on issuing a final permit-to-install will be made after consideration of comments received and oral testimony if a public hearing is conducted. Any permit fee that will be due upon issuance of a final Permit-to-Install is indicated in the Authorization section. Please do not submit any payment now. If you have any questions, please contact Akron Regional Air Quality Management District at (330)375-2480.

Sincerely,

Michael W. Ahern, Manager
Permit Issuance and Data Management Section, DAPC

Cc: U.S. EPA Region 5 Via E-Mail Notification
ARAQMD; Pennsylvania; West Virginia; Canada



Permit Strategy Write-Up

1. Check all that apply:

- X Synthetic Minor Determination
Netting Determination

2. Source Description: Eaton Corporation Aurora has requested a Federally Enforceable Permit to Install and Operate (FEPTIO) for the installation of the following emissions units at its facility located at 115 Lena Drive in Aurora, Ohio:

Table with 2 columns: Emissions Unit ID, Description. Rows include P027 (MR 11 Machine 14) and P028 (Karg Braider K6).

- 3. Facility Emissions and Attainment Status: Some of the adhesive materials used in the facility's manufacturing process contain ingredients which are listed as hazardous air pollutants (HAP) under Section 112(b) of the Clean Air Act.
4. Source Emissions: The permittee has agreed to federally-enforceable material usage restrictions and HAP emissions limitations in order to avoid Title V permitting status.
5. Conclusion: Compliance with the rolling, 12-month material usage restrictions and HAP emission limitations, in accordance with the associated monitoring, recordkeeping and reporting requirements, will ensure this facility remains a synthetic minor source, through OAC rule 3745-31-05(D), with respect to HAP emissions.
6. Please provide additional notes or comments as necessary: None.
7. Total Permit Allowable Emissions Summary (for informational purposes only):

Summary table with 2 columns: Pollutant, Tons Per Year. Rows include OC (7.79), Individual HAP (9.95), and Combined HAP (24.0).

PUBLIC NOTICE

3/5/2012 Issuance of Draft Air Pollution Permit-To-Install and Operate

Eaton Corp Aurora

115 Lena Ave,

Aurora, OH 44202

Portage County

FACILITY DESC.:Unlaminated Plastics Profile Shape Manufacturing

PERMIT #: P0109151

PERMIT TYPE: Initial Installation

PERMIT DESC: Initial installation of MR 11 Machine 14 and Karg Braider K6, two new units for the application of fiber to plastic hose/tubing.

The Director of the Ohio Environmental Protection Agency issued the draft permit above. The permit and complete instructions for requesting information or submitting comments may be obtained at: <http://epa.ohio.gov/dapc/permitsonline.aspx> by entering the permit # or: Kelly Kanoza, Akron Regional Air Quality Management District, 146 South High Street, Room 904, Akron, OH 44308. Ph: (330)375-2480



DRAFT

**Division of Air Pollution Control
Permit-to-Install and Operate
for
Eaton Corp Aurora**

Facility ID:	1667020046
Permit Number:	P0109151
Permit Type:	Initial Installation
Issued:	3/5/2012
Effective:	To be entered upon final issuance
Expiration:	To be entered upon final issuance



Division of Air Pollution Control
Permit-to-Install and Operate
for
Eaton Corp Aurora

Table of Contents

Authorization 1
A. Standard Terms and Conditions 3
1. What does this permit-to-install and operate ("PTIO") allow me to do?..... 4
2. Who is responsible for complying with this permit? 4
3. What records must I keep under this permit? 4
4. What are my permit fees and when do I pay them?..... 4
5. When does my PTIO expire, and when do I need to submit my renewal application? 4
6. What happens to this permit if my project is delayed or I do not install or modify my source? 5
7. What reports must I submit under this permit? 5
8. If I am required to obtain a Title V operating permit in the future, what happens to the operating provisions and PER obligations under this permit? 5
9. What are my obligations when I perform scheduled maintenance on air pollution control equipment? ... 5
10. Do I have to report malfunctions of emissions units or air pollution control equipment? If so, how must I report? 6
11. Can Ohio EPA or my local air agency inspect the facility where the emission unit(s) is/are located? 6
12. What happens if one or more emissions units operated under this permit is/are shut down permanently? 6
13. Can I transfer this permit to a new owner or operator?..... 7
14. Does compliance with this permit constitute compliance with OAC rule 3745-15-07, "air pollution nuisance"? 7
15. What happens if a portion of this permit is determined to be invalid? 7
B. Facility-Wide Terms and Conditions..... 8
C. Emissions Unit Terms and Conditions 13
1. P027, MR 11 Machine 14..... 14
2. P028, Karg Braider K6 20



Authorization

Facility ID: 1667020046
 Application Number(s): A0042859
 Permit Number: P0109151
 Permit Description: Initial installation of MR 11 Machine 14 and Karg Braider K6, two new units for the application of fiber to plastic hose/tubing.
 Permit Type: Initial Installation
 Permit Fee: \$800.00 *DO NOT send payment at this time, subject to change before final issuance*
 Issue Date: 3/5/2012
 Effective Date: To be entered upon final issuance
 Expiration Date: To be entered upon final issuance
 Permit Evaluation Report (PER) Annual Date: To be entered upon final issuance

This document constitutes issuance to:

Eaton Corp Aurora
 115 Lena Ave
 Aurora, OH 44202

of a Permit-to-Install and Operate for the emissions unit(s) identified on the following page.

Ohio EPA District Office or local air agency responsible for processing and administering your permit:

Akron Regional Air Quality Management District
 146 South High Street, Room 904
 Akron, OH 44308
 (330)375-2480

The above named entity is hereby granted this Permit-to-Install and Operate for the air contaminant source(s) (emissions unit(s)) listed in this section 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 described emissions unit(s) will operate in compliance with applicable State and Federal laws and regulations.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Scott J. Nally
 Director



Authorization (continued)

Permit Number: P0109151

Permit Description: Initial installation of MR 11 Machine 14 and Karg Braider K6, two new units for the application of fiber to plastic hose/tubing.

Permits for the following Emissions Unit(s) or groups of Emissions Units are in this document as indicated below:

Emissions Unit ID:	P027
Company Equipment ID:	MR 11 Machine 14
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P028
Company Equipment ID:	Karg Braider K6
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable



A. Standard Terms and Conditions

1. What does this permit-to-install and operate ("PTIO") allow me to do?

This permit allows you to install and operate the emissions unit(s) identified in this PTIO. You must install and operate the unit(s) in accordance with the application you submitted and all the terms and conditions contained in this PTIO, including emission limits and those terms that ensure compliance with the emission limits (for example, operating, recordkeeping and monitoring requirements).

2. Who is responsible for complying with this permit?

The person identified on the "Authorization" page, above, is responsible for complying with this permit until the permit is revoked, terminated, or transferred. "Person" means a person, firm, corporation, association, or partnership. The words "you," "your," or "permittee" refer to the "person" identified on the "Authorization" page above.

The permit applies only to the emissions unit(s) identified in the permit. If you install or modify any other equipment that requires an air permit, you must apply for an additional PTIO(s) for these sources.

3. What records must I keep under this permit?

You must keep all records required by this permit, including monitoring data, test results, strip-chart recordings, calibration data, maintenance records, and any other record required by this permit for five years from the date the record was created. You can keep these records electronically, provided they can be made available to Ohio EPA during an inspection at the facility. Failure to make requested records available to Ohio EPA upon request is a violation of this permit requirement.

4. What are my permit fees and when do I pay them?

There are two fees associated with permitted air contaminant sources in Ohio:

- PTIO fee. This one-time fee is based on a fee schedule in accordance with Ohio Revised Code (ORC) section 3745.11, or based on a time and materials charge for permit application review and permit processing if required by the Director.

You will be sent an invoice for this fee after you receive this PTIO and payment is due within 30 days of the invoice date. You are required to pay the fee for this PTIO even if you do not install or modify your operations as authorized by this permit.

- Annual emissions fee. Ohio EPA will assess a separate fee based on the total annual emissions from your facility. You self-report your emissions in accordance with Ohio Administrative Code (OAC) Chapter 3745-78. This fee assessed is based on a fee schedule in ORC section 3745.11 and funds Ohio EPA's permit compliance oversight activities. Unless otherwise specified, facilities subject to one or more synthetic minor restrictions must use Ohio EPA's "Air Services" to submit annual emissions associated with this permit requirement. Ohio EPA will notify you when it is time to report your emissions and to pay your annual emission fees.

5. When does my PTIO expire, and when do I need to submit my renewal application?

This permit expires on the date identified at the beginning of this permit document (see "Authorization" page above) and you must submit a renewal application to renew the permit. Ohio EPA will send a renewal notice to you approximately six months prior to the expiration date of this permit. However, it is



very important that you submit a complete renewal permit application (postmarked prior to expiration of this permit) even if you do not receive the renewal notice.

If a complete renewal application is submitted before the expiration date, Ohio EPA considers this a timely application for purposes of ORC section 119.06, and you are authorized to continue operating the emissions unit(s) covered by this permit beyond the expiration date of this permit until final action is taken by Ohio EPA on the renewal application.

6. What happens to this permit if my project is delayed or I do not install or modify my source?

This PTIO expires 18 months after the issue date identified on the "Authorization" page above unless otherwise specified if you have not (1) started constructing the new or modified emission sources identified in this permit, or (2) entered into a binding contract to undertake such construction. This deadline can be extended by up to 12 months, provided you apply to Ohio EPA for this extension within a reasonable time before the 18-month period has ended and you can show good cause for any such extension.

7. What reports must I submit under this permit?

An annual permit evaluation report (PER) is required in addition to any malfunction reporting required by OAC rule 3745-15-06 or other specific rule-based reporting requirement identified in this permit. Your PER due date is identified in the Authorization section of this permit.

8. If I am required to obtain a Title V operating permit in the future, what happens to the operating provisions and PER obligations under this permit?

If you are required to obtain a Title V permit under OAC Chapter 3745-77 in the future, the permit-to-operate portion of this permit will be superseded by the issued Title V permit. From the effective date of the Title V permit forward, this PTIO will effectively become a PTI (permit-to-install) in accordance with OAC rule 3745-31-02(B). The following terms and conditions will no longer be applicable after issuance of the Title V permit: Section B, Term 1.b) and Section C, for each emissions unit, Term a)(2).

The PER requirements in this permit remain effective until the date the Title V permit is issued and is effective, and cease to apply after the effective date of the Title V permit. The final PER obligation will cover operations up to the effective date of the Title V permit and must be submitted on or before the submission deadline identified in this permit on the last day prior to the effective date of the Title V permit.

9. What are my obligations when I perform scheduled maintenance on air pollution control equipment?

You must perform scheduled maintenance of air pollution control equipment in accordance with OAC rule 3745-15-06(A). If scheduled maintenance requires shutting down or bypassing any air pollution control equipment, you must also shut down the emissions unit(s) served by the air pollution control equipment during maintenance, unless the conditions of OAC rule 3745-15-06(A)(3) are met. Any emissions that exceed permitted amount(s) under this permit (unless specifically exempted by rule) must be reported as deviations in the annual permit evaluation report (PER), including nonexempt excess emissions that occur during approved scheduled maintenance.

10. Do I have to report malfunctions of emissions units or air pollution control equipment? If so, how must I report?

If you have a reportable malfunction of any emissions unit(s) or any associated air pollution control system, you must report this to the Akron Regional Air Quality Management District in accordance with OAC rule 3745-15-06(B). Malfunctions that must be reported are those that result in emissions that exceed permitted emission levels. It is your responsibility to evaluate control equipment breakdowns and operational upsets to determine if a reportable malfunction has occurred.

If you have a malfunction, but determine that it is not a reportable malfunction under OAC rule 3745-15-06(B), it is recommended that you maintain records associated with control equipment breakdown or process upsets. Although it is not a requirement of this permit, Ohio EPA recommends that you maintain records for non-reportable malfunctions.

11. Can Ohio EPA or my local air agency inspect the facility where the emission unit(s) is/are located?

Yes. Under Ohio law, the Director or his authorized representative may inspect the facility, conduct tests, examine records or reports to determine compliance with air pollution laws and regulations and the terms and conditions of this permit. You must provide, within a reasonable time, any information Ohio EPA requests either verbally or in writing.

12. What happens if one or more emissions units operated under this permit is/are shut down permanently?

Ohio EPA can terminate the permit terms associated with any permanently shut down emissions unit. "Shut down" means the emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31.

You should notify Ohio EPA of any emissions unit that is permanently shut down by submitting¹ a certification that identifies the date on which the emissions unit was permanently shut down. The certification must be submitted by an authorized official from the facility. You cannot continue to operate an emissions unit once the certification has been submitted to Ohio EPA by the authorized official.

You must comply with all recordkeeping and reporting for any permanently shut down emissions unit in accordance with the provisions of the permit, regulations or laws that were enforceable during the period of operation, such as the requirement to submit a PER, air fee emission report, or malfunction report. You must also keep all records relating to any permanently shutdown emissions unit, generated while the emissions unit was in operation, for at least five years from the date the record was generated.

Again, you cannot resume operation of any emissions unit certified by the authorized official as being permanently shut down without first applying for and obtaining a permit pursuant to OAC Chapter 3745-31.

¹Permittees that use Ohio EPA's "Air Services" can mark the affected emissions unit(s) as "permanently shutdown" in the facility profile along with the date the emissions unit(s) was permanently removed and/or disabled. Submitting the facility profile update will constitute notifying of the permanent shutdown of the affected emissions unit(s).

13. Can I transfer this permit to a new owner or operator?

You can transfer this permit to a new owner or operator. If you transfer the permit, you must follow the procedures in OAC Chapter 3745-31, including notifying Ohio EPA or the local air agency of the change in ownership or operator. Any transferee of this permit must assume the responsibilities of the transferor permit holder.

14. Does compliance with this permit constitute compliance with OAC rule 3745-15-07, "air pollution nuisance"?

This permit and OAC rule 3745-15-07 prohibit operation of the air contaminant source(s) regulated under this permit in a manner that causes a nuisance. Ohio EPA can require additional controls or modification of the requirements of this permit through enforcement orders or judicial enforcement action if, upon investigation, Ohio EPA determines existing operations are causing a nuisance.

15. What happens if a portion of this permit is determined to be invalid?

If a portion of this permit is determined to be invalid, the remainder of the terms and conditions remain valid and enforceable. The exception is where the enforceability of terms and conditions are dependent on the term or condition that was declared invalid.

B. Facility-Wide Terms and Conditions

1. This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
 - a) For the purpose of a permit-to-install document, the facility-wide terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - (1) None.
 - b) For the purpose of a permit-to-operate document, the facility-wide terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
 - (1) The total emissions of each individual hazardous air pollutant (HAP) and the total emissions for all combined HAPs from this facility shall not exceed 9.95 tons per rolling, 12-month period, and 24.0 tons per rolling, 12-month period, respectively. These federally enforceable limitations are being established for the purpose of avoiding Title V applicability. To ensure these limits are met, the permittee has committed to meet the annual methylene chloride (MeCl) usage restriction under b)(2).
 - (2) The maximum annual facility-wide usage rate of adhesive materials containing methylene chloride shall not exceed 10,050 gallons based upon a rolling, 12 month summation of the monthly adhesive usage rates.
 - (3) The permittee shall collect and record the following information each month for the entire facility:
 - a. the company identification for each adhesive material employed;
 - b. the number of gallons of each adhesive material employed;
 - c. the number of gallons of all adhesive materials employed [i.e., the sum of b)(3)b. for the calendar month];
 - d. the amount of each individual HAP, in pounds per gallon, in each adhesive material employed;
 - e. the emissionsof each individual HAP, in pounds, from each adhesive material employed [i.e., b)(3)b.multiplied by b)(3)d.];
 - f. the total individual HAP emissions, in pounds, from all the adhesive materials employed [i.e., for each individual HAP, the sumof b)(3)e.from all adhesive materials];
 - g. the total combined HAP emissions, in pounds, from all adhesive materials employed [i.e., the sum of b)(3)f. for all HAPs from all adhesive materials];
 - h. the rolling, 12-month individual HAP emissions, in tons;
 - i. the rolling, 12-month combined HAP emissions, in tons; and
 - j. the rolling, 12-month adhesive materials usage rate, in gallons.

- (4) The permittee shall submit quarterly deviation (excursion) reports that identify:
- a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the potential to emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:
 - i. 9.95 tons of any individual HAP per rolling, 12-month period;
 - ii. 24.0 tons of all combined HAPs per rolling, 12-month period; and
 - iii. 10,050 gallons of adhesive materials per rolling, 12-month period.
 - b. the probable cause of each deviation (excursion);
 - c. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and
 - d. the magnitude and duration of each deviation (excursion).

If no deviations (excursions) occurred during a calendar quarter, the permittee shall submit a report that states that no deviations (excursions) occurred during the reporting period.

The quarterly reports shall be submitted, electronically through Ohio EPA Air Services, each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (the appropriate District Office or local air agency).

- (5) Compliance with the facility-wide emission limitations shall be determined in accordance with the following methods:
- a. Emission Limitations:
 - 9.95 tons of any individual HAP per rolling, 12-month period
 - 24.0 tons of all combined HAPs per rolling, 12-month period
- Applicable Compliance Method:
- Compliance with the HAP emission limitations identified above shall be demonstrated through the record keeping requirements in b)(3).

2. The federally enforceable permit-to-install and operate (FEPTIO) application was evaluated based on the actual materials and the design parameters of the facility's exhaust system as a single point source for all emissions units, as specified by the permittee. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to these emissions units for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted at over one ton per year using an air dispersion model such as SCREEN3, AERMOD, or ISCST3, or other Ohio EPA approved model.

- a) The predicted 1-hour maximum ground level concentration result(s) from the approved air dispersion model, was compared to the maximum acceptable ground level concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled "Review of New Sources of Air Toxic Emissions, Option A", as follows:
- (1) the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit, (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):
 - a. Threshold Limit Value (TLV) from the American Conference of Governmental Industrial Hygienists (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; or
 - b. Short Term Exposure Limit (STEL) or the ceiling value from the ACGIH "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.
 - (2) The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).
 - (3) This standard is then adjusted to account for the duration of the exposure or the operating hours of the emissions unit, i.e., "X" hours per day and "Y" days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was and shall be used to determine the MAGLC:
$$\text{TLV}/10 \times 8/X \times 5/Y = 4 \text{ TLV}/XY = \text{MAGLC}$$
 - (4) The following summarizes the results of dispersion modeling for the significant toxic contaminants (emitted at 1 or more tons/year) or "worst case" toxic contaminant(s):
Toxic Contaminant: Methylene Chloride (MeCl)
TLV (mg/m³): 173.68
Maximum Hourly Emission Rate (lbs/hr): 2.27
Predicted 1-Hour Maximum Ground Level Concentration (ug/m³): 33.86
MAGLC (ug/m³): 4,135
- The permittee has demonstrated that emissions from this emissions unit of the toxic air contaminants identified above are calculated to be less than eighty per cent of the MAGLC; any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F).
- b) Prior to making any physical changes to or changes in the method of operation of the emissions units that could impact the parameters or values used in the predicted 1-hour maximum ground level concentration, the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:

- (1) changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower TLV than the lowest TLV previously modeled;
- (2) changes in the composition of the materials, or use of new materials that would result in an increase in emissions of any toxic air contaminant listed in OAC rule 3745-114-01, which was modeled from the initial (or last) application; and
- (3) physical changes to an emissions unit or its exhaust parameters (e.g., increased/decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Toxic Air Contaminant Statute" 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 a non-restrictive change to a parameter or process operation, where compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), has been documented. If a change meets the definition of a "modification", the permittee shall apply for and obtain a final FEPTIO prior to the change. The Director (appropriate Ohio EPA District Office or local air agency) may consider any significant departure from the operations of the emissions unit, described in the permit application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and may require the permittee to submit a permit application for the increased emissions.

- c) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F):
 - (1) a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxics modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);
 - (2) the MAGLC for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F);
 - (3) a copy of the computer model runs that established the predicted 1-hour maximum ground level concentration, which demonstrated the emissions units to be in compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), initially, and for each change that requires re-evaluation of the toxic air contaminant emissions; and
 - (4) the documentation of the initial evaluation of compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to an emissions unit or the materials applied.
- d) The permittee shall maintain a record of any change made to a parameter or value used in the dispersion model, used to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1-hour maximum ground level concentration. The record shall include the date and reason(s) for the change and if the change would increase the ground-level concentration.

C. Emissions Unit Terms and Conditions



1. P027, MR 11 Machine 14

Operations, Property and/or Equipment Description:

Plastic hose/tubing is reinforced by the addition of fiber which is wrapped around and secured by various adhesives. The equipment consists of hose reels, adhesive applicators, braiders, capstan puller and coilers.

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. None.

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. b)(1)c.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3), as effective 11/30/2001	0.69 lb organic compound (OC)/hr and 3.02 tons OC/yr See b)(2)a. and b)(2)b.
b.	OAC rule 3745-31-05(A)(3), as effective 12/01/2006	See b)(2)c.
c.	OAC rule 3745-31-05(D) Synthetic Minor to Avoid Title V	See b)(2)d.
d.	OAC rule 3745-21-28(C)(1)	2.1 lbs VOC/gallon of adhesive material See b)(2)e.through b)(2)g. and c)(1)

(2) Additional Terms and Conditions

a. The hourly and annual OC emission limitations were established to reflect the potentials to emit for this emissions unit. Therefore, no monitoring,

recordkeeping and/or reporting requirements are necessary to ensure compliance with these emissions limitations.

- b. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to the Ohio Revised Code (ORC) changes effective August 3, 2006 (Senate Bill 265 changes), such that BAT is no longer required by State regulations for National Ambient Air Quality Standards (NAAQS) pollutant(s) less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, then these emissions limitations/control measures no longer apply.
- c. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the OC emissions from this air contaminant source since the uncontrolled potential to emit for OC is less than 10 tons per year.

- d. Emissions unit P027 is part of the facility-wide, federally enforceable emission limitations and operational restrictions established for the purpose of avoiding Title V applicability for hazardous air pollutants (HAP) under Section B.1.b) of this permit.
- e. Unless exempted under OAC rule 3745-21-28(A)(1) or (2), or any other applicable limit under OAC rule 3745-21-28(C)(1).
- f. The permittee may use add-on air pollution control equipment, in lieu of complying with the VOC content limitation, if such equipment meets the following requirements:
- i. the VOC emissions from the use of all adhesives, sealants, adhesive primers or sealant primers subject to this rule are reduced by an overall capture and control efficiency of at least eighty-five per cent, by weight;
 - ii. the combustion temperature is monitored continuously if a thermal incinerator is operated;
 - iii. inlet and exhaust gas temperatures are monitored continuously if a catalytic incinerator is operated;
 - iv. control device efficiency is monitored continuously if a carbon absorber or control device other than a thermal or catalytic incinerator is operated; and

- v. operation records sufficient to demonstrate compliance with the requirements of this subdivision are maintained as required by d)(2).
- g. The permittee shall comply with the following control measures:
 - i. store all volatile organic compound (VOC)-containing adhesives, adhesive primers, and process-related waste materials in closed containers;
 - ii. store all VOC-containing cleaning materials and used shop towels in closed containers;
 - iii. ensure that mixing and storage containers used for VOC-containing cleaning materials, adhesives, adhesive primers, and process-related waste materials are kept closed at all times except when depositing or removing these materials;
 - iv. minimize spills of VOC-containing cleaning materials, adhesives, adhesive primers, and process-related waste materials;
 - v. convey VOC-containing cleaning materials, adhesives, adhesive primers, and process-related waste materials from one location to another in closed containers or pipes; and
 - vi. minimize VOC emission from cleaning of application, storage, mixing, and conveying equipment by ensuring that equipment cleaning is performed without atomizing the cleaning solvent and all spent solvent is captured in closed containers.
- c) Operational Restrictions
 - (1) All adhesives, sealants, adhesive primers or sealant primers shall be applied using one of the following application methods: electrostatic spray, HVLP spray, flow coat, roll coat, dip coat (including electrodeposition), airless spray, or air-assisted airless spray. An equivalent coating application method capable of achieving similar transfer efficiencies to HVLP may be approved by the director on a case-by-case basis.
- d) Monitoring and/or Recordkeeping Requirements
 - (1) The permittee shall maintain records of the following information:
 - a. a list of each adhesive, sealant, adhesive primer, and sealant primer in use and in storage;
 - b. a data sheet or material list which provides the material name, manufacturer identification, and material application;
 - c. catalysts, reducers or other components used and the mix ratio;
 - d. the VOC content of each product as supplied;
 - e. the final VOC content as applied; and



- f. the monthly volume of each adhesive, sealant, adhesive primer, and sealant primer used.
- (2) If complying with paragraph (C)(2) in lieu of paragraph (C)(1) of OAC rule 3745-21-28 through the use of add-on air pollution control equipment, the permittee shall record the key operating parameters for the control equipment, including but not limited to, the following information:
 - a. on a daily basis, the combustion temperature, inlet and exhaust gas temperatures and control device efficiency, as appropriate, pursuant to b)(2)f.;
 - b. daily hours of operation; and
 - c. all maintenance performed including the date and type of maintenance.
- (3) All records made to determine compliance with OAC rule 3745-21-28 shall be maintained for five years from the date such record is created and shall be made available to the director or the director's designee within ninety days of a request.

e) Reporting Requirements

- (1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be completed electronically and submitted via the Ohio EPA eBusiness Center: Air Services by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

The permittee shall include in the annual PER any changes made to a parameter or value used in the dispersion model, that was used to maintain compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration.

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitations:

0.69 lb OC/hr and 3.02 tons OC/yr

Applicable Compliance Methods:

Compliance with the hourly allowable OC emission limitation identified above shall be demonstrated by multiplying the maximum hose/tubing usage rate of 800 ft/hr by the maximum adhesive application rates and corresponding MSDS-supplied emission factors listed in the following table:

Material	Max. Application Rate (lbs/ft)	Emission Factor (lbs/lb)
MCU	0.002	0.20
NMP	0.0005	0.915

If required, compliance with the hourly allowable OC emission limitation shall be based on stack testing conducted in accordance with Methods 18, 25, or 25A, as appropriate, of 40 CFR Part 60, Appendix A.

Compliance with the annual allowable OC emission limitation identified above shall be determined by multiplying the hourly allowable OC emission limitation by 8,760 hrs/yr, and then dividing by 2,000 lbs/ton. Therefore, as long as compliance with the hourly allowable emission limitation is maintained, compliance with the annual allowable emission limitation shall be demonstrated.

b. Emission Limitation:

2.1 lbs VOC/gallon of adhesive material

Applicable Compliance Methods:

Except as otherwise provided in the paragraphs below, the VOC and solids content of all non-aerosol adhesives, and adhesive primers shall be determined using USEPA method 24, as identified in 40 CFR 60, Appendix A.

The organic content of exempt organic compounds shall be determined using ASTM D4457-02, as applicable.

The VOC content of any plastic cement welding adhesive or primer shall be determined using SCAQMD method 316A.

To determine if a diluent is a reactive diluent, the percent of the reactive organic compound that becomes an integral part of the finished materials shall be determined using SCAQMD method 316A.

For adhesives that do not contain reactive diluents, pounds of VOC per gallon of adhesive, less water and exempt compounds, shall be calculated according to the following equation:

$$\text{Pounds of VOC per gallon of adhesive} = (W_s - W_w - W_e) / (V_m - V_w - V_e)$$

Where:

W_s = weight of volatile compounds, in pounds.

W_w = weight of water, in pounds.

W_e = weight of exempt compounds, in pounds.

V_m = volume of material, in gallons.

V_w = volume of water, in gallons.

V_e = volume of exempt compounds, in gallons.

For adhesives that contain reactive diluents, the VOC content of the adhesive is determined after curing. The pounds of VOC per gallon of adhesive, less

water and exempt compounds, shall be calculated according to the following equation:

$$\text{Pounds of VOC per gallon of adhesive} = (Wrs - Wrw - Wre) / (Vrm - Vrw - Vre)$$

Where:

Wrs = weight of volatile compounds not consumed during curing, in pounds.

Wrw = weight of water not consumed during curing, in pounds.

Wre = weight of exempt compounds not consumed during curing, in pounds.

Vrm = volume of material not consumed during curing, in gallons.

Vrw = volume of water not consumed during curing, in gallons.

Vre = volume of exempt compounds not consumed during curing, in gallons.

Pounds of VOC per gallon of material shall be calculated according to the following equation:

$$\text{Pounds of VOC per gallon of material} = (Ws - Ww - We) / Vm$$

Where:

Ws = weight of volatile compounds, in pounds.

Ww = weight of water, in pounds.

We = weight of exempt compounds, in pounds.

Vm = volume of material, in gallons.

Percent VOC by weight shall be calculated according to the following equation:

$$\% \text{ VOC by weight} = (Wv / W) \times 100$$

Where:

Wv = weight of VOC, in pounds.

W = weight of material, in pounds.

If add-on air pollution control equipment is used to meet the requirements of this rule, the following emissions testing shall be applicable:

The general provisions specified under paragraphs (A)(2) to (A)(5) of rule 3745-21-10 of the Administrative Code shall apply to compliance testing; and

The test methods and procedures of paragraph (C) of rule 3745-21-10 of the Administrative Code shall be followed.

For the purpose of demonstrating compliance with the emission control requirements of paragraph (C)(2) of OAC rule 3745-21-28, the affected source shall be run at typical operating conditions and flow rates compatible with scheduled production during any emission testing.

g) Miscellaneous Requirements

- (1) None.



2. P028, Karg Braider K6

Operations, Property and/or Equipment Description:

Plastic hose/tubing is reinforced by the addition of fiber which is wrapped around and secured by various adhesives. The equipment consists of hose reels, adhesive applicators, braiders, capstan puller and coilers.

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. None.

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. b)(1)c.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3), as effective 11/30/2001	1.09 lbs organic compound (OC)/hr and 4.77 tons OC/yr See b)(2)a. and b)(2)b.
b.	OAC rule 3745-31-05(A)(3), as effective 12/01/2006	See b)(2)c.
c.	OAC rule 3745-31-05(D) Synthetic Minor to Avoid Title V	See b)(2)d.
d.	OAC rule 3745-21-28(C)(1)	2.1 lbs VOC/gallon of adhesive material See b)(2)e.through b)(2)g. and c)(1)

(2) Additional Terms and Conditions

a. The hourly and annual OC emission limitations were established to reflect the potentials to emit for this emissions unit. Therefore, no monitoring,

recordkeeping, and/or reporting requirements are necessary to ensure compliance with these emission limitations.

- b. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to the Ohio Revised Code (ORC) changes effective August 3, 2006 (Senate Bill 265 changes), such that BAT is no longer required by State regulations for National Ambient Air Quality Standards (NAAQS) pollutant(s) less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, then these emissions limitations/control measures no longer apply.
- c. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the OC emissions from this air contaminant source since the uncontrolled potential to emit for OC is less than 10 tons per year.

- d. Emissions unit P028 is part of the facility-wide, federally enforceable emission limitations and operational restrictions established for the purpose of avoiding Title V applicability for hazardous air pollutants (HAP) under Section B.1.b) of this permit.
- e. Unless exempted under OAC rule 3745-21-28(A)(1) or (2), or any other applicable limit under OAC rule 3745-21-28(C)(1).
- f. The permittee may use add-on air pollution control equipment, in lieu of complying with the VOC content limitation, if such equipment meets the following requirements:
- i. the VOC emissions from the use of all adhesives, sealants, adhesive primers or sealant primers subject to this rule are reduced by an overall capture and control efficiency of at least eighty-five per cent, by weight;
 - ii. the combustion temperature is monitored continuously if a thermal incinerator is operated;
 - iii. inlet and exhaust gas temperatures are monitored continuously if a catalytic incinerator is operated;
 - iv. control device efficiency is monitored continuously if a carbon absorber or control device other than a thermal or catalytic incinerator is operated; and

- v. operation records sufficient to demonstrate compliance with the requirements of this subdivision are maintained as required by d)(2).
- g. The permittee shall comply with the following control measures:
 - i. store all volatile organic compound (VOC)-containing adhesives, adhesive primers, and process-related waste materials in closed containers;
 - ii. store all VOC-containing cleaning materials and used shop towels in closed containers;
 - iii. ensure that mixing and storage containers used for VOC-containing cleaning materials, adhesives, adhesive primers, and process-related waste materials are kept closed at all times except when depositing or removing these materials;
 - iv. minimize spills of VOC-containing cleaning materials, adhesives, adhesive primers, and process-related waste materials;
 - v. convey VOC-containing cleaning materials, adhesives, adhesive primers, and process-related waste materials from one location to another in closed containers or pipes; and
 - vi. minimize VOC emission from cleaning of application, storage, mixing, and conveying equipment by ensuring that equipment cleaning is performed without atomizing the cleaning solvent and all spent solvent is captured in closed containers.
- c) **Operational Restrictions**
 - (1) All adhesives, sealants, adhesive primers or sealant primers shall be applied using one of the following application methods: electrostatic spray, HVLP spray, flow coat, roll coat, dip coat (including electrodeposition), airless spray, or air-assisted airless spray. An equivalent coating application method capable of achieving similar transfer efficiencies to HVLP may be approved by the director on a case-by-case basis.
- d) **Monitoring and/or Recordkeeping Requirements**
 - (1) The permittee shall maintain records of the following information:
 - a. a list of each adhesive, sealant, adhesive primer, and sealant primer in use and in storage;
 - b. a data sheet or material list which provides the material name, manufacturer identification, and material application;
 - c. catalysts, reducers or other components used and the mix ratio;
 - d. the VOC content of each product as supplied;
 - e. the final VOC content as applied; and

- f. the monthly volume of each adhesive, sealant, adhesive primer, and sealant primer used.
 - (2) If complying with paragraph (C)(2) in lieu of paragraph (C)(1) of OAC rule 3745-21-28 through the use of add-on air pollution control equipment, the permittee shall record the key operating parameters for the control equipment, including but not limited to, the following information:
 - a. on a daily basis, the combustion temperature, inlet and exhaust gas temperatures and control device efficiency, as appropriate, pursuant to b)(2)f.;
 - b. daily hours of operation; and
 - c. all maintenance performed including the date and type of maintenance.
 - (3) All records made to determine compliance with OAC rule 3745-21-28 shall be maintained for five years from the date such record is created and shall be made available to the director or the director's designee within ninety days of a request.
- e) Reporting Requirements
- (1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be completed electronically and submitted via the Ohio EPA eBusiness Center: Air Services by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

The permittee shall include in the annual PER any changes made to a parameter or value used in the dispersion model, that was used to maintain compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration.
- f) Testing Requirements
- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emission Limitations:

1.09 lbs OC/hr and 4.77 tons OC/yr

Applicable Compliance Methods:

Compliance with the hourly allowable OC emission limitation identified above shall be demonstrated by multiplying the maximum hose/tubing usage rate of 260.21 ft/hr by the maximum adhesive application rates and corresponding MSDS-supplied emission factors listed in the following table:

Material	Max. Application Rate (lbs/ft)	Emission Factor (lbs/lb)
MCU	0.0038	0.20
NMP	0.0038	0.915

If required, compliance with the hourly allowable OC emission limitation shall be based on stack testing conducted in accordance with Methods 18, 25, or 25A, as appropriate, of 40 CFR Part 60, Appendix A.

Compliance with the annual allowable OC emission limitation identified above shall be determined by multiplying the hourly allowable OC emission limitation by 8,760 hrs/yr and dividing by 2,000 lbs/ton. Therefore, as long as compliance with the hourly allowable emission limitation is maintained, compliance with the annual allowable emission limitation shall be demonstrated.

b. Emission Limitation:

2.1 lbs VOC/gallon of adhesive material

Applicable Compliance Methods:

Except as otherwise provided in the paragraphs below, the VOC and solids content of all non-aerosol adhesives, and adhesive primers shall be determined using USEPA method 24, as identified in 40 CFR 60, Appendix A.

The organic content of exempt organic compounds shall be determined using ASTM D4457-02, as applicable.

The VOC content of any plastic cement welding adhesive or primer shall be determined using SCAQMD method 316A.

To determine if a diluent is a reactive diluent, the percent of the reactive organic compound that becomes an integral part of the finished materials shall be determined using SCAQMD method 316A.

For adhesives that do not contain reactive diluents, pounds of VOC per gallon of adhesive, less water and exempt compounds, shall be calculated according to the following equation:

$$\text{Pounds of VOC per gallon of adhesive} = (Ws - Ww - We) / (Vm - Vw - Ve)$$

Where:

Ws = weight of volatile compounds, in pounds.

Ww = weight of water, in pounds.

We = weight of exempt compounds, in pounds.

Vm = volume of material, in gallons.

Vw = volume of water, in gallons.

Ve = volume of exempt compounds, in gallons.

For adhesives that contain reactive diluents, the VOC content of the adhesive is determined after curing. The pounds of VOC per gallon of adhesive, less water and exempt compounds, shall be calculated according to the following equation:

$$\text{Pounds of VOC per gallon of adhesive} = (Wrs - Wrw - Wre) / (Vrm - Vrw - Vre)$$

Where:

Wrs = weight of volatile compounds not consumed during curing, in pounds.

Wrw = weight of water not consumed during curing, in pounds.

Wre = weight of exempt compounds not consumed during curing, in pounds.

Vrm = volume of material not consumed during curing, in gallons.

Vrw = volume of water not consumed during curing, in gallons.

Vre = volume of exempt compounds not consumed during curing, in gallons.

Pounds of VOC per gallon of material shall be calculated according to the following equation:

$$\text{Pounds of VOC per gallon of material} = (Ws - Ww - We) / Vm$$

Where:

Ws = weight of volatile compounds, in pounds.

Ww = weight of water, in pounds.

We = weight of exempt compounds, in pounds.

Vm = volume of material, in gallons.

Percent VOC by weight shall be calculated according to the following equation:

$$\% \text{ VOC by weight} = (Wv / W) \times 100$$

Where:

Wv = weight of VOC, in pounds.

W = weight of material, in pounds.

If add-on air pollution control equipment is used to meet the requirements of this rule, the following emissions testing shall be applicable:

The general provisions specified under paragraphs (A)(2) to (A)(5) of rule 3745-21-10 of the Administrative Code shall apply to compliance testing; and

The test methods and procedures of paragraph (C) of rule 3745-21-10 of the Administrative Code shall be followed.

For the purpose of demonstrating compliance with the emission control requirements of paragraph (C)(2) of OAC rule 3745-21-28, the affected source shall be run at typical operating conditions and flow rates compatible with scheduled production during any emission testing.

g) Miscellaneous Requirements

- (1) None.