



Environmental
Protection Agency

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

12/20/2011

Timothy Klemm
Spectrum Dispersions Inc
PO Box 805
Ravenna, OH 44266

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

Facility ID: 1667060140
Permit Number: P0108904
Permit Type: Renewal
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
No	MODELING SUBMITTED
Yes	SYNTHETIC MINOR TO AVOID TITLE V
Yes	FEDERALLY ENFORCABLE PTIO (FEPTIO)
No	SYNTHETIC MINOR TO AVOID MAJOR GHG

Dear Permit Holder:

Enclosed please find a final Air Pollution Permit-to-Install and Operate (PTIO) which will allow you to install, modify, and/or operate the described emissions unit(s) in the manner indicated in the permit. Because this permit contains conditions and restrictions, please read it very carefully. Please complete a survey at www.epa.ohio.gov/dapc/permitsurvey.aspx and give us feedback on your permitting experience. We value your opinion.

The issuance of this PTI is a final action of the Director 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, made payable to "Ohio Treasurer Josh Mandel," 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

If you have any questions, please contact Akron Regional Air Quality Management District at (330)375-2480 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469. This permit can be accessed electronically on the DAPC Web page, www.epa.ohio.gov/dapc, by clicking the "Issued Air Pollution Control Permits" link.

Sincerely,

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

Cc: ARAQMD



Response to Comments

Facility ID:	1667060140
Facility Name:	Spectrum Dispersions Inc
Facility Description:	Paints and Allied Products
Facility Address:	225 W Lake St Ravenna, OH 44266 Portage County
Permit:	P0108904, Permit-To-Install and Operate - Renewal
A public notice for the draft permit issuance was published in the Ohio EPA Weekly Review and appeared in the The Record Courier on 11/18/2011. The comment period ended on 12/18/2011.	
Hearing date (if held)	NA
Hearing Public Notice Date (if different from draft public notice)	NA

The following comments were received during the comment period specified. Ohio EPA reviewed and considered all comments received during the public comment period. By law, Ohio EPA has authority to consider specific issues related to protection of the environment and public health. Often, public concerns fall outside the scope of that authority. For example, concerns about zoning issues are addressed at the local level. Ohio EPA may respond to those concerns in this document by identifying another government agency with more direct authority over the issue.

In an effort to help you review this document, the questions are grouped by topic and organized in a consistent format. PDF copies of the original comments in the format submitted are available upon request.

1. **Topic: Format Corrections**

- a. Comment: Page breaks, formatting inconsistencies, and minor typos were corrected by ARAQMD.



FINAL

**Division of Air Pollution Control
Permit-to-Install and Operate
for
Spectrum Dispersions Inc**

Facility ID:	1667060140
Permit Number:	P0108904
Permit Type:	Renewal
Issued:	12/20/2011
Effective:	12/20/2011
Expiration:	12/20/2016



Division of Air Pollution Control
Permit-to-Install and Operate
for
Spectrum Dispersions Inc

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Authorization

Facility ID: 1667060140
Application Number(s): A0042845
Permit Number: P0108904
Permit Description: FEPTIO Renewal permit for paint manufacturing operations (8 mills and 16 mixers).
Synthetic minor restrictions to avoid 40 CFR Part 63, Subpart HHHHH.
Permit Type: Renewal
Permit Fee: \$0.00
Issue Date: 12/20/2011
Effective Date: 12/20/2011
Expiration Date: 12/20/2016
Permit Evaluation Report (PER) Annual Date: Jan 1 - Dec 31, Due Feb 15

This document constitutes issuance to:

Spectrum Dispersions Inc
225 W Lake St
Ravenna, OH 44266

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

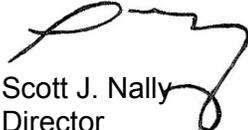
Ohio EPA District Office or local air agency responsible for processing and administering your permit:

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: P0108904
 Permit Description: FEPTIO Renewal permit for paint manufacturing operations (8 mills and 16 mixers).
 Synthetic minor restrictions to avoid 40 CFR Part 63, Subpart HHHHH.

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

Group Name: EU Group 1

Emissions Unit ID:	P001
Company Equipment ID:	Mixer # 12
Superseded Permit Number:	16-02442
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P002
Company Equipment ID:	SM # 32
Superseded Permit Number:	16-02442
General Permit Category and Type:	Not Applicable

Group Name: EU Group 2

Emissions Unit ID:	P003
Company Equipment ID:	Mixer # 2
Superseded Permit Number:	16-02442
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P004
Company Equipment ID:	SM # 31
Superseded Permit Number:	16-02442
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P005
Company Equipment ID:	Mixer # 11
Superseded Permit Number:	16-02442
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P010
Company Equipment ID:	Mixer # 15
Superseded Permit Number:	16-02442
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P013
Company Equipment ID:	Mixer # 19
Superseded Permit Number:	16-02442
General Permit Category and Type:	Not Applicable

Group Name: EU Group 3

Emissions Unit ID:	P006
Company Equipment ID:	Mixer # 6
Superseded Permit Number:	16-02442
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P007
Company Equipment ID:	Mixer # 7
Superseded Permit Number:	16-02442
General Permit Category and Type:	Not Applicable

Group Name: EU Group 4

Emissions Unit ID:	P009
Company Equipment ID:	Mixer # 14
Superseded Permit Number:	16-02442
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P011
Company Equipment ID:	SM # 40
Superseded Permit Number:	16-02442
General Permit Category and Type:	Not Applicable

Group Name: EU Group 5

Emissions Unit ID:	P008
Company Equipment ID:	Mixer # 20
Superseded Permit Number:	16-02442
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P021
Company Equipment ID:	Mixer # 1
Superseded Permit Number:	16-02442
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P022
Company Equipment ID:	SM # 33
Superseded Permit Number:	16-02442
General Permit Category and Type:	Not Applicable

Group Name: EU Group 6

Emissions Unit ID:	P012
Company Equipment ID:	Mixer # 21
Superseded Permit Number:	16-02442
General Permit Category and Type:	Not Applicable

Group Name: EU Group 7

Emissions Unit ID:	P020
Company Equipment ID:	Mixer # 3
Superseded Permit Number:	16-02442
General Permit Category and Type:	Not Applicable

Group Name: EU Group 8

Emissions Unit ID:	P014
Company Equipment ID:	Mixer # 5
Superseded Permit Number:	16-02442
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P015
Company Equipment ID:	SM # 34
Superseded Permit Number:	16-02442
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P016
Company Equipment ID:	Mixer # 9
Superseded Permit Number:	16-02442
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P017
Company Equipment ID:	SM # 35

Final Permit-to-Install and Operate

Spectrum Dispersions Inc

Permit Number: P0108904

Facility ID: 1667060140

Effective Date: 12/20/2011

Superseded Permit Number:	16-02442
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P018
Company Equipment ID:	Mixer # 13
Superseded Permit Number:	16-02442
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P019
Company Equipment ID:	SM # 36
Superseded Permit Number:	16-02442
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P023
Company Equipment ID:	Mixer # 18
Superseded Permit Number:	16-02442
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P024
Company Equipment ID:	SM # 37
Superseded Permit Number:	16-02442
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

Final Permit-to-Install and Operate

Spectrum Dispersions Inc

Permit Number: P0108904

Facility ID: 1667060140

Effective Date: 12/20/2011

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 combined annual emissions from the facility (emissions units P001 through P024) shall not exceed the following limitations, as rolling, 12-month summations:

- a. 99.0 tons of volatile organic compounds (VOC);
- b. 9.9 tons of any individual hazardous air pollutant (HAP); and
- c. 24.9 tons of all HAP combined.

(2) To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the emission levels specified in the following table for the total facility-wide emissions (P001 through P024, combined):

Month(s)	VOC Limit (tons)	Individual HAP Limit (tons)	Combined HAP Limit (tons)
1	9.0	0.9	2.25
1-2	18.0	1.8	4.5
1-3	27.0	2.7	6.75
1-4	36.0	3.6	9.0
1-5	45.0	4.5	11.25
1-6	54.0	5.4	13.5
1-7	63.0	6.3	15.75
1-8	72.0	7.2	18.0
1-9	81.0	8.1	20.25
1-10	90.0	9.0	22.5
1-11	99.0	9.9	24.75
1-12	99.0	9.9	24.9

(3) The permittee shall calculate and record the following information each month for emissions units P001 through P024, combined:

Final Permit-to-Install and Operate

Spectrum Dispersions Inc

Permit Number: P0108904

Facility ID: 1667060140

Effective Date: 12/20/2011

- a. the total calculated VOC emissions for all the coatings/adhesives produced, in pounds;
 - b. the total calculated emissions for each individual HAP for all the coatings/adhesives produced, in pounds;
 - c. the total calculated emissions of all combined HAP for all the coatings/adhesives produced, in pounds;
 - d. during the first 12 calendar months of operation following the issuance of this permit, the monthly cumulative VOC, individual HAP, and combined HAP emissions, in tons; and
 - e. beginning the first month after the first 12 months of operation following the issuance of this permit, the rolling, 12-month VOC, individual HAP, and combined HAP emission rates, in tons.
- (4) The permittee shall submit quarterly deviation (excursion) reports, in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit, 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. during the first 12 calendar months of operation following the issuance of this permit, all exceedances of the monthly cumulative VOC, individual HAP, and combined HAP emissions; and
 - ii. beginning the first month following the first 12 calendar months of operation following the issuance of this permit, all exceedances of the rolling, 12-month VOC, individual HAP, and combined HAP emission limitations of 99.0 tons, 9.9 tons, and 24.9 tons, respectively;
 - 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 quarter.

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).

Final Permit-to-Install and Operate

Spectrum Dispersions Inc

Permit Number: P0108904

Facility ID: 1667060140

Effective Date: 12/20/2011

(5) Compliance with the facility-wide emissions limitations shall be determined in accordance with the following methods:

a. Emission Limitations:

99.0 tons VOC per rolling, 12-month period

9.9 tons of any individual HAP per rolling, 12-month period

24.9 tons of combined HAP per rolling, 12-month period

Applicable Compliance Method:

Compliance with the rolling, 12-month emission limitations identified above shall be demonstrated by the record keeping requirements specified in b)(3).

C. Emissions Unit Terms and Conditions

1. Emissions Unit Group1: P001 and P002 (Toluene, Cyclohexanone)

EU ID	Operations, Property and/or Equipment Description
P001	Mixer #12; HighSpeed Mixer, 30 HP
P002	Mill #32; Sand Mill, 16-gallon capacity

- 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)b., c)(2), c)(3), d)(1), and e)(3).
- 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), PTI 16-02442 issued 10/17/2006	Volatile Organic Compound (VOC) emissions shall not exceed: 7.83 lbs/day and 1.43 tons/yr, for emissions unit P001 7.83 lbs/day and 1.43 tons/yr, for emissions unit P002 Toluene emissions shall not exceed: 5.25 lbs/day and 0.96 ton/yr, for emissions unit P001 5.25 lbs/day and 0.96 ton/yr, for emissions unit P002 Cyclohexanone emissions shall not exceed: 2.58 lbs/day and 0.47 ton/yr, for emissions unit P001 2.58 lbs/day and 0.47 ton/yr, for emissions unit P002

Final Permit-to-Install and Operate

Spectrum Dispersions Inc

Permit Number: P0108904

Facility ID: 1667060140

Effective Date: 12/20/2011

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		Particulate emissions (PE) shall not exceed: 0.10 lb/hr and 0.44 ton/yr, for emissions unit P001 0.10 lb/hr and 0.44 ton/yr, for emissions unit P002 The visible PE from any stack shall not exceed 10% opacity, as a 6-minute average, and there shall be no visible PE emitted from the building ventilation. See b)(2)a. and c)(1)
b.	OAC rule 3745-31-05(D), Synthetic Minor to Avoid Title V	See c)(2) and c)(3)
c.	OAC rule 3745-17-07(A) and (B)	See b)(2)c.
d.	OAC rule 3745-17-08(A)	See b)(2)c.
e.	OAC rule 3745-17-11(B)	See b)(2)c.

(2) Additional Terms and Conditions

- a. The hourly and annual PE limitations were established to reflect the emissions unit's potentials to emit. Therefore, no additional monitoring, record keeping and/or reporting requirements are necessary to ensure compliance with these emission limitations.

If any proposed change, such as production capacity, operating procedures, process materials, control equipment, or anything else increases the emissions unit's potential to emit, the permittee shall apply for and obtain either a modification to the permit or a new final federally enforceable permit to install and operate (FEPTIO) prior to making the change.

- b. The facility-wide, federally enforceable emission limitations are based on the maximum annual production rate restrictions under c)(2) of this permit, and are being established for the purposes of avoiding Title V major source applicability.
- c. The requirements of this rule are less stringent than those established pursuant to OAC rule 3745-31-05(A)(3).

c) Operational Restrictions

- (1) The permittee shall properly install, operate, and maintain a closed-lid design for this emissions unit to contain and limit PE emissions, in accordance with the manufacturer's recommendations, instructions, and operating manuals, and to the extent possible with good engineering design.

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- (2) The maximum annual coatings/adhesives production rate for each emissions unit shall not exceed the amounts specified in the following table based upon a rolling, 12-month summation of the production rates:

Emissions Unit	Maximum Annual Production Limits (pounds)
P001	566,770
P002	566,770

- (3) To ensure federal enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the cumulative coatings/adhesives production rates specified in the following table:

Month(s)	Maximum Allowable Cumulative Production Limits (pounds)	
	P001	P002
1	111,350	111,350
1-2	167,025	167,025
1-3	222,700	222,700
1-4	278,375	278,375
1-5	334,050	334,050
1-6	389,725	389,725
1-7	445,400	445,400
1-8	501,075	501,075
1-9	566,770	566,770
1-10	566,770	566,770
1-11	566,770	566,770
1-12	566,770	566,770

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual production restriction shall be based upon a rolling, 12-month summation of the monthly production rates.

d) **Monitoring and/or Recordkeeping Requirements**

- (1) The permittee shall calculate and record the following information each month for this emissions unit:
- a. the coatings/adhesives production rate, in pounds;
 - b. the total calculated VOC emissions from all the coatings/adhesives produced, in pounds [i.e., the production rate in d)(1)a. multiplied by the following company-supplied evaporation rate/loss factor]

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Emissions Unit	VOC Emission Factor (by weight)
P001	0.50%
P002	0.50%

- c. the total calculated emissions for each individual HAP from all the coatings/adhesives produced, in pounds [i.e., the production rate in d)(1)a. multiplied by a company-supplied emission factor. The evaporation rates/loss factors for toluene and Cyclohexanone are estimated at 0.67% and 0.34%, by weight, respectively.];
 - d. the total calculated emissions for all combined HAP, from all the coatings/adhesives produced, in pounds [i.e., the sum of the individual HAP emissions, from d)(1)c. for all HAP];
 - e. the number of the days the emissions unit was in operation;
 - f. the average daily VOC emissions, in pounds per day [i.e., the VOC emissions in d)(1)b. divided by the days of operation in d)(1)e.];
 - g. the average daily toluene emissions, in pounds per day [i.e., the toluene emissions in d)(1)c. divided by the days of operation in d)(1)e.];
 - h. the average daily Cyclohexanone emissions, in pounds per day [i.e., the Cyclohexanone emissions in d)(1)c. divided by the days of operation in d)(1)e.]; and
 - i. the rolling, 12-month summation of coatings/adhesives production rate, in pounds.
- (2) For each day during which the permittee did not operate the closed-lid system to control PE from this emissions unit, the permittee shall maintain a record of such instance for this emissions unit.
- (3) The FEPTIO application for this emissions unit was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to this emissions unit 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. 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:
- a. 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

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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):

- i. 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
 - ii. STEL (short term exposure limit) 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.
- b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).
 - c. 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:
$$TLV/10 \times 8/X \times 5/Y = 4 TLV/XY = MAGLC$$
 - d. 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: Toluene

TLV (mg/m³): 188.4

Maximum Hourly Emission Rate (lbs/hr): 1.95

Predicted 1-Hour Maximum Ground Level Concentration (ug/m³): 3,255

MAGLC (ug/m³): 6,729

Toxic Contaminant: Cyclohexanone

TLV (mg/m³): 96.3

Maximum Hourly Emission Rate (lbs/hr): 3.49

Predicted 1-Hour Maximum Ground Level Concentration (ug/m³): 2,405

MAGLC (ug/m³): 3,438

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).

- (4) Prior to making any physical changes to or changes in the method of operation of the emissions unit 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:

- a. 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;
- b. 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
- c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "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.

- (5) 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):
 - a. 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.);
 - b. the MAGLC for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F);
 - c. a copy of the computer model runs that established the predicted 1-hour maximum ground level concentration, which demonstrated the emissions unit 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
 - d. 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 the emissions unit or the materials applied.

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- (6) 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.

e) Reporting Requirements

- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

- (2) 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. during the first 12 calendar months of operation following the issuance of this permit, all exceedances of the monthly cumulative coatings/adhesives production rate restrictions in c)(3); and

ii. beginning the first month following the first 12 calendar months of operation following the issuance of this permit, all exceedances of the rolling, 12-month coatings/adhesives production restrictions in c)(2).

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 quarter.

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 Ohio EPA district office or local air agency).

- (3) 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 12 months for each air contaminant source identified in this permit.

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

ground-level concentration. If no changes to the emissions, emissions unit, or the exhaust stack have been made, then the report shall include a statement to this effect.

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:

7.83 lbs VOC/day and 1.43 tons VOC/yr, for emissions unit P001

7.83 lbs VOC/day and 1.43 tons VOC/yr, for emissions unit P002

Applicable Compliance Methods:

Compliance with the daily allowable VOC emission limitations identified above shall be demonstrated by the recordkeeping requirements specified in d)(1).

If required, compliance with allowable emission limitations shall be determined by stack testing conducted in accordance with Methods 18, 25, or 25A, as appropriate, of 40 CFR Part 60, Appendix A.

The annual emission limitations were established by multiplying the daily allowable limits by 365 days per year, and dividing by 2000 pounds per ton. Therefore, compliance with the annual limitations shall be demonstrated provided compliance is maintained with the daily limitations.

b. Emission Limitations:

5.25 lbs toluene/day and 0.96 ton toluene/yr, for emissions unit P001

5.25 lbs toluene/day and 0.96 ton toluene/yr, for emissions unit P002

Applicable Compliance Methods:

Compliance with the daily allowable toluene emission limitations identified above shall be demonstrated by the recordkeeping requirements specified in d)(1).

If required, compliance with allowable emission limitations shall be determined by stack testing conducted in accordance with Methods 18, 25, or 25A, as appropriate, of 40 CFR Part 60, Appendix A.

The annual emission limitations were established by multiplying the daily allowable limits by 365 days per year, and dividing by 2000 pounds per ton. Therefore, compliance with the annual limitations shall be demonstrated provided compliance is maintained with the daily limitations.

c. Emission Limitations:

2.58 lbs Cyclohexanone/day and 0.47 ton Cyclohexanone/yr, for emissions unit P001

2.58lbsCyclohexanone/day and 0.47 ton Cyclohexanone/yr, for emissions unit P002

Applicable Compliance Methods:

Compliance with the daily allowable Cyclohexanone emission limitations identified above shall be demonstrated by the recordkeeping requirements specified in d)(1).

If required, compliance with allowable emission limitations shall be determined by stack testing conducted in accordance with Methods 18, 25, or 25A, as appropriate, of 40 CFR Part 60, Appendix A.

The annual emission limitations were established by multiplying the daily allowable limits by 365 days per year, and dividing by 2000 pounds per ton. Therefore, compliance with the annual limitations shall be demonstrated provided compliance is maintained with the daily limitations.

d. Emission Limitations:

0.10 lb PE/hr and 0.44 ton PE/yr, for emissions unit P001

0.10 lb PE/hr and 0.44 ton PE/yr, for emissions unit P002

Applicable Compliance Methods:

If required, compliance with the hourly allowable PE limitations identified above shall be determined by stack testing conducted in accordance with Methods 1 - 5 of 40 CFR Part 60, Appendix A.

The annual PE limitation was calculated by multiplying the hourly limitation by 8760 hours per year, and dividing by 2000 pounds per ton. Therefore, as long as compliance with the hourly limitation is maintained, compliance with the annual limitation shall be demonstrated.

e. Emission Limitations:

Visible PE from any stack shall not exceed 10% opacity, as a 6-minute average.

Applicable Compliance Methods:

If required, compliance with the opacity limitation identified above shall be determined by visible emission observations performed in accordance with Method 9 of 40 CFR Part 60, Appendix A.

f. Emission Limitations:

No visible PE shall be emitted,from the building ventilation

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Applicable Compliance Methods:

If required, compliance with the opacity limitation indentified above shall be determined by visible emission observations performed in accordance with Method 22 of 40 CFR Part 60, Appendix A.

g) Miscellaneous Requirements

(1) None.

2. Emissions Unit Group2: P003,P004,P005,P010, and P013 (Methyl Ethyl Ketone)

EU ID	Operations, Property and/or Equipment Description
P003	Mixer #2; High Speed Mixer, 15 HP
P004	Sand Mill #31; Sand Mill, 3-gallon capacity
P005	Mixer #11; High Speed Mixer, 30 HP
P010	Mixer #15; High Speed Mixer, 30 HP
P013	Mixer #19, High Speed Mixer, 30 HP

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)b., c)(2), c)(3), d)(1), and e)(3).

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), PTI 16-02442 issued 10/17/2006	Volatile Organic Compound (VOC) emissions shall not exceed: 6.93 lbs/day and 1.26 tons/yr, for emissions unit P003 6.93 lbs/day and 1.26 tons/yr, for emissions unit P004 18.87 lbs/day and 3.44 tons/yr, for emissions unit P005 39.95 lbs/day and 7.29 tons/yr, for emissions unit P010 21.17 lbs/day and 3.86 tons/yr, for emissions unit P013 Methyl Ethyl Ketone (MEK) emissions shall not exceed:

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	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>6.93 lbs/day and 1.26 tons/yr, for emissions unit P003</p> <p>6.93 lbs/day and 1.26 tons/yr, for emissions unit P004</p> <p>18.87 lbs/day and 3.44 tons/yr, for emissions unit P005</p> <p>39.95 lbs/day and 7.29 tons/yr, for emissions unit P010</p> <p>21.17 lbs/day and 3.86 tons/yr, for emissions unit P013</p> <p>Particulate emissions (PE) shall not exceed: 0.10 lb/hr and 0.44 ton/yr, for emissions unit P003 0.10 lb/hr and 0.44 ton/yr, for emissions unit P004 0.10 lb/hr and 0.44 ton/yr, for emissions unit P005 0.10 lb/hr and 0.44 ton/yr, for emissions unit P010 0.10 lb/hr and 0.44 ton/yr, for emissions unit P013</p> <p>The visible PE from any stack shall not exceed 10% opacity, as a 6-minute average, and there shall be no visible PE emitted from the building ventilation.</p> <p>See b)(2)a. and c)(1)</p>
b.	OAC rule 3745-31-05(D), Synthetic Minor to Avoid Title V	See c)(2) and c)(3)
c.	OAC rule 3745-17-07(A) and (B)	See b)(2)c.
d.	OAC rule 3745-17-08(A)	See b)(2)c.
e.	OAC rule 3745-17-11(B)	See b)(2)c.

(2) Additional Terms and Conditions

- a. The hourly and annual PE limitations were established to reflect the emissions unit's potentials to emit. Therefore, no additional monitoring, record keeping and/or reporting requirements are necessary to ensure compliance with these emission limitations.

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If any proposed change, such as production capacity, operating procedures, process materials, control equipment, or anything else increases the emissions unit's potential to emit, the permittee shall apply for and obtain either a modification to the permit or a new final federally enforceable permit to install and operate (FEPTIO) prior to making the change.

- b. The facility-wide, federally enforceable emission limitations are based on the maximum annual production rate restrictions under c)(2) of this permit, and are being established for the purposes of avoiding Title V major source applicability.
- c. The requirements of this rule are less stringent than those established pursuant to OAC rule 3745-31-05(A)(3).

c) Operational Restrictions

- (1) The permittee shall properly install, operate, and maintain a closed-lid design for this emissions unit to contain and limit PE emissions, in accordance with the manufacturer's recommendations, instructions, and operating manuals, and to the extent possible with good engineering design.
- (2) The maximum annual coatings/adhesives production rate for each emissions unit shall not exceed the amounts specified in the following table based upon a rolling, 12-month summation of the production rates:

Emissions Unit	Maximum Annual Production Limits (pounds)
P003	309,920
P004	172,900
P005	197,600
P010	1,220,000
P013	1,510,080

- (3) To ensure federal enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the cumulative coatings/adhesives production rates specified in the following table:

Month(s)	Maximum Allowable Cumulative Production Limits (pounds)				
	P003	P004	P005	P010	P013
1	57,960	23,450	29,640	183,000	222,540
1-2	115,920	46,900	59,280	366,000	445,080
1-3	143,920	64,900	79,040	488,000	600,080
1-4	171,920	82,900	98,800	610,000	755,080
1-5	199,920	100,920	118,560	732,000	906,080
1-6	227,920	181,920	138,320	854,000	1,057,080

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1-7	255,920	136,900	158,080	976,000	1,208,080
1-8	283,920	154,900	177,840	1,098,000	1,359,080
1-9	309,920	172,900	197,600	1,220,000	1,510,080
1-10	309,920	172,900	197,600	1,220,000	1,510,080
1-11	309,920	172,900	197,600	1,220,000	1,510,080
1-12	309,920	172,900	197,600	1,220,000	1,510,080

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual production restriction shall be based upon a rolling, 12-month summation of the monthly production rates.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall calculate and record the following information each month for this emissions unit:

- a. the coatings/adhesives production rate, in pounds;
- b. the total calculated VOC emissions from all the coatings/adhesives produced, in pounds [i.e., the production rate in d)(1)a. multiplied by the following company-supplied evaporation rate/loss factor]

Emissions Unit	VOC Emission Factor (by weight)
P003	0.82%
P004	1.46%
P005	3.49%
P010	1.20%
P013	0.51%

- c. the total calculated emissions for each individual HAP from all the coatings/adhesives produced, in pounds [i.e., the production rate in d)(1)a. multiplied by a company-supplied emission factor. The evaporation rate/loss factor for MEK is estimated at 1.00%, by weight.];
- d. the total calculated emissions for all combined HAP, from all the coatings/adhesives produced, in pounds [i.e., the sum of the individual HAP emissions, from d)(1)c. for all HAP];
- e. the number of the days the emissions unit was in operation;
- f. the average daily VOC emissions, in pounds per day [i.e., the VOC emissions in d)(1)b. divided by the days of operation in d)(1)e.];
- g. the average daily MEK emissions, in pounds per day [i.e., the MEK emissions in d)(1)c. divided by the days of operation in d)(1)e.]; and

- h. the rolling, 12-month summation of coatings/adhesives production rate, in pounds.
- (2) For each day during which the permittee did not operate the closed-lid system to control PE from this emissions unit, the permittee shall maintain a record of such instance for this emissions unit.
- (3) The FEPTIO application for this emissions unit was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to this emissions unit 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. 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:
- a. 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):
 - i. 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
 - ii. STEL (short term exposure limit) 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.
 - b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).
 - c. 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:
$$TLV/10 \times 8/X \times 5/Y = 4 TLV/XY = MAGLC$$
 - d. 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: Methyl Ethyl Ketone

TLV (mg/m3): 589.8

Maximum Hourly Emission Rate (lbs/hr): 8.97

Predicted 1-Hour Maximum Ground Level Concentration (ug/m3): 14,750

MAGLC (ug/m3): 21,063

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).

- (4) Prior to making any physical changes to or changes in the method of operation of the emissions unit 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:
- a. 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;
 - b. 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
 - c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "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.

- (5) 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):
- a. 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.);

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- b. the MAGLC for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the "Toxic Air Contaminant Statute, ORC 3704.03(F);
 - c. a copy of the computer model runs that established the predicted 1-hour maximum ground level concentration, which demonstrated the emissions unit 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
 - d. 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 the emissions unit or the materials applied.
- (6) 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.
- e) Reporting Requirements
- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.
 - (2) 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. during the first 12 calendar months of operation following the issuance of this permit, all exceedances of the monthly cumulative coatings/adhesives production rate restrictions in c)(3); and
 - ii. beginning the first month following the first 12 calendar months of operation following the issuance of this permit, all exceedances of the rolling, 12-month coatings/adhesives production restrictions in c)(2).
 - 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 quarter.

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 Ohio EPA district office or local air agency).

- (3) 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 12 months for each air contaminant source identified in this permit.

The permittee shall include in the PER any changes made to a parameter or value used in the dispersion model, that was used to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. If no changes to the emissions, emissions unit, or the exhaust stack have been made, then the report shall include a statement to this effect.

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:

6.93 lbs VOC/day and 1.26 tons VOC/yr, for emissions unit P003

6.93 lbs VOC/day and 1.26 tons VOC/yr, for emissions unit P004

18.87 lbs VOC/day and 3.44 tons VOC/yr, for emissions unit P005

39.95 lbs VOC/day and 7.29 tons VOC/yr, for emissions unit P010

21.17 lbs VOC/day and 3.86 tons VOC/yr, for emissions unit P013

Applicable Compliance Methods:

Compliance with the daily allowable VOC emission limitations identified above shall be demonstrated by the recordkeeping requirements specified in d)(1).

If required, compliance with allowable emission limitations shall be determined by stack testing conducted in accordance with Methods 18, 25, or 25A, as appropriate, of 40 CFR Part 60, Appendix A.

The annual emission limitations were established by multiplying the daily allowable limits by 365 days per year, and dividing by 2000 pounds per ton. Therefore, compliance with the annual limitations shall be demonstrated provided compliance is maintained with the daily limitations.

b. Emission Limitations:

6.93 lbs MEK/day and 1.26 tons MEK/yr, for emissions unit P003

6.93 lbs MEK/day and 1.26 tons MEK/yr, for emissions unit P004

18.87 lbs MEK/day and 3.44 tons MEK/yr, for emissions unit P005

39.95 lbs MEK/day and 7.29 tons MEK/yr, for emissions unit P010

21.17 lbs MEK/day and 3.86 tons MEK/yr, for emissions unit P013

Applicable Compliance Methods:

Compliance with the daily allowable MEK emission limitations identified above shall be demonstrated by the recordkeeping requirements specified in d)(1).

If required, compliance with allowable emission limitations shall be determined by stack testing conducted in accordance with Methods 18, 25, or 25A, as appropriate, of 40 CFR Part 60, Appendix A.

The annual emission limitations were established by multiplying the daily allowable limits by 365 days per year, and dividing by 2000 pounds per ton. Therefore, compliance with the annual limitations shall be demonstrated provided compliance is maintained with the daily limitations.

c. Emission Limitations:

0.10 lb PE/hr and 0.44 ton PE/yr, for emissions unit P003

0.10 lb PE/hr and 0.44 ton PE/yr, for emissions unit P004

0.10 lb PE/hr and 0.44 ton PE/yr, for emissions unit P005

0.10 lb PE/hr and 0.44 ton PE/yr, for emissions unit P010

0.10 lb PE/hr and 0.44 ton PE/yr, for emissions unit P013

Applicable Compliance Methods:

If required, compliance with the hourly allowable PE limitations identified above shall be determined by stack testing conducted in accordance with Methods 1 - 5 of 40 CFR Part 60, Appendix A.

The annual PE limitation was calculated by multiplying the hourly limitation by 8760 hours per year, and dividing by 2000 pounds per ton. Therefore, as long as compliance with the hourly limitation is maintained, compliance with the annual limitation shall be demonstrated.

d. Emission Limitations:

Visible PE from any stack shall not exceed 10% opacity, as a 6-minute average.

Applicable Compliance Methods:

If required, compliance with the opacity limitation identified above shall be determined by visible emission observations performed in accordance with Method 9 of 40 CFR Part 60, Appendix A.

e. Emission Limitations:

No visible PE shall be emitted from the building ventilation

Applicable Compliance Methods:

If required, compliance with the opacity limitation indentified above shall be determined by visible emission observations performed in accordance with Method 22 of 40 CFR Part 60, Appendix A.

g) Miscellaneous Requirements

(1) None.

3. Emissions Unit Group 3: P006 and P007 (Toluene, Methyl Ethyl Ketone)

EU ID	Operations, Property and/or Equipment Description
P006	Mixer #6; High Speed Mixer, 30 HP
P007	Mixer #7; High Speed Mixer, 30 HP

- 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)b., c)(2), c)(3), d)(1), and e)(3).
- 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), PTI 16-02442 issued 10/17/2006	Volatile Organic Compound (VOC) emissions shall not exceed: 30.0 lbs/day and 5.48 tons/yr, for emissions unit P006 30.0 lbs/day and 5.48 tons/yr, for emissions unit P007 Toluene emissions shall not exceed: 5.25 lbs/day and 0.96 ton/yr, for emissions unit P006 5.25 lbs/day and 0.96 ton/yr, for emissions unit P007 Methyl Ethyl Ketone (MEK) emissions shall not exceed: 24.8 lbs/day and 4.53 tons/yr, for emissions unit P006 24.8 lbs/day and 4.53 tons/yr, for emissions

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	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		unit P007 Particulate emissions (PE) shall not exceed: 0.10 lb/hr and 0.44 ton/yr, for emissions unit P006 0.10 lb/hr and 0.44 ton/yr, for emissions unit P007 The visible PE from any stack shall not exceed 10% opacity, as a 6-minute average, and there shall be no visible PE emitted from the building ventilation. See b)(2)a. and c)(1)
b.	OAC rule 3745-31-05(D), Synthetic Minor to Avoid Title V	See c)(2) and c)(3)
c.	OAC rule 3745-17-07(A) and (B)	See b)(2)c.
d.	OAC rule 3745-17-08(A)	See b)(2)c.
e.	OAC rule 3745-17-11(B)	See b)(2)c.

(2) Additional Terms and Conditions

- a. The hourly and annual PE limitations were established to reflect the emissions unit's potentials to emit. Therefore, no additional monitoring, record keeping and/or reporting requirements are necessary to ensure compliance with these emission limitations.

If any proposed change, such as production capacity, operating procedures, process materials, control equipment, or anything else increases the emissions unit's potential to emit, the permittee shall apply for and obtain either a modification to the permit or a new final federally enforceable permit to install and operate (FEPTIO) prior to making the change.

- b. The facility-wide, federally enforceable emission limitations are based on the maximum annual production rate restrictions under c)(2) of this permit, and are being established for the purposes of avoiding Title V major source applicability.
- c. The requirements of this rule are less stringent than those established pursuant to OAC rule 3745-31-05(A)(3).

c) Operational Restrictions

- (1) The permittee shall properly install, operate, and maintain a closed-lid design for this emissions unit to contain and limit PE emissions, in accordance with the manufacturer's recommendations, instructions, and operating manuals, and to the extent possible with good engineering design.

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- (2) The maximum annual coatings/adhesives production rate for each emissions unit shall not exceed the amounts specified in the following table based upon a rolling, 12-month summation of the production rates:

Emissions Unit	Maximum Annual Production Limits (pounds)
P006	1,555,535
P007	1,555,535

- (3) To ensure federal enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the cumulative coatings/adhesives production rates specified in the following table:

Month(s)	Maximum Allowable Cumulative Production Limits (pounds)	
	P006	P007
1	233,325	233,325
1-2	466,650	466,650
1-3	622,205	622,205
1-4	777,760	777,760
1-5	933,315	933,315
1-6	1,088,870	1,088,870
1-7	1,244,425	1,244,425
1-8	1,399,982	1,399,982
1-9	1,555,535	1,555,535
1-10	1,555,535	1,555,535
1-11	1,555,535	1,555,535
1-12	1,555,535	1,555,535

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual production restriction shall be based upon a rolling, 12-month summation of the monthly production rates.

d) **Monitoring and/or Recordkeeping Requirements**

- (1) The permittee shall calculate and record the following information each month for this emissions unit:
- a. the coatings/adhesives production rate, in pounds;
 - b. the total calculated VOC emissions from all the coatings/adhesives produced, in pounds [i.e., the production rate in d)(1)a. multiplied by the following company-supplied evaporation rate/loss factor]

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Emissions Unit	VOC Emission Factor (by weight)
P006	0.70%
P007	0.70%

- c. the total calculated emissions for each individual HAP from all the coatings/adhesives produced, in pounds [i.e., the production rate in d)(1)a. multiplied by a company-supplied emission factor. The evaporation rates/loss factors for toluene and MEK are estimated at 0.17% and 0.83%, by weight, respectively.];
 - d. the total calculated emissions for all combined HAP, from all the coatings/adhesives produced, in pounds [i.e., the sum of the individual HAP emissions, from d)(1)c. for all HAP];
 - e. the number of the days the emissions unit was in operation;
 - f. the average daily VOC emissions, in pounds per day [i.e., the VOC emissions in d)(1)b. divided by the days of operation in d)(1)e.];
 - g. the average daily toluene emissions, in pounds per day [i.e., the toluene emissions in d)(1)c. divided by the days of operation in d)(1)e.];
 - h. the average daily MEK emissions, in pounds per day [i.e., the MEK emissions in d)(1)c. divided by the days of operation in d)(1)e.]; and
 - i. the rolling, 12-month summation of coatings/adhesives production rate, in pounds.
- (2) For each day during which the permittee did not operate the closed-lid system to control PE from this emissions unit, the permittee shall maintain a record of such instance for this emissions unit.
- (3) The FEPTIO application for this emissions unit was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to this emissions unit 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. 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:
- a. 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):

- i. 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
 - ii. STEL (short term exposure limit) 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.
- b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).
 - c. 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:

$$TLV/10 \times 8/X \times 5/Y = 4 TLV/XY = MAGLC$$

- d. 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: Toluene

TLV (mg/m³): 188.4

Maximum Hourly Emission Rate (lbs/hr): 1.95

Predicted 1-Hour Maximum Ground Level Concentration (ug/m³): 3,255

MAGLC (ug/m³): 6,729

Toxic Contaminant: Methyl Ethyl Ketone

TLV (mg/m³): 589.8

Maximum Hourly Emission Rate (lbs/hr): 8.97

Predicted 1-Hour Maximum Ground Level Concentration (ug/m³): 14,750

MAGLC (ug/m³): 21,063

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).

- (4) Prior to making any physical changes to or changes in the method of operation of the emissions unit 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:

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- a. 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;
- b. 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
- c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "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.

- (5) 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):
 - a. 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.);
 - b. the MAGLC for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F);
 - c. a copy of the computer model runs that established the predicted 1-hour maximum ground level concentration, which demonstrated the emissions unit 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
 - d. 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 the emissions unit or the materials applied.
- (6) 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.

e) Reporting Requirements

(1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

(2) 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. during the first 12 calendar months of operation following the issuance of this permit, all exceedances of the monthly cumulative coatings/adhesives production rate restrictions in c)(3); and

ii. beginning the first month following the first 12 calendar months of operation following the issuance of this permit, all exceedances of the rolling, 12-month coatings/adhesives production restrictions in c)(2).

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 quarter.

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 Ohio EPA district office or local air agency).

(3) 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 12 months for each air contaminant source identified in this permit.

The permittee shall include in the PER any changes made to a parameter or value used in the dispersion model, that was used to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. If no changes to the emissions, emissions unit, or the exhaust stack have been made, then the report shall include a statement to this effect.

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:

30.0 lbs VOC/day and 5.48 tons VOC/yr, for emissions unit P006

30.0 lbs VOC/day and 5.48 tons VOC/yr, for emissions unit P007

Applicable Compliance Methods:

Compliance with the daily allowable VOC emission limitations identified above shall be demonstrated by the recordkeeping requirements specified in d)(1).

If required, compliance with allowable emission limitations shall be determined by stack testing conducted in accordance with Methods 18, 25, or 25A, as appropriate, of 40 CFR Part 60, Appendix A.

The annual emission limitations were established by multiplying the daily allowable limits by 365 days per year, and dividing by 2000 pounds per ton. Therefore, compliance with the annual limitations shall be demonstrated provided compliance is maintained with the daily limitations.

b. Emission Limitations:

5.25 lbs toluene/day and 0.96 ton toluene/yr, for emissions unit P006

5.25 lbs toluene/day and 0.96 ton toluene/yr, for emissions unit P007

Applicable Compliance Methods:

Compliance with the daily allowable toluene emission limitations identified above shall be demonstrated by the recordkeeping requirements specified in d)(1).

If required, compliance with allowable emission limitations shall be determined by stack testing conducted in accordance with Methods 18, 25, or 25A, as appropriate, of 40 CFR Part 60, Appendix A.

The annual emission limitations were established by multiplying the daily allowable limits by 365 days per year, and dividing by 2000 pounds per ton. Therefore, compliance with the annual limitations shall be demonstrated provided compliance is maintained with the daily limitations.

c. Emission Limitations:

24.8 lbs MEK/day and 4.53 tons MEK/yr, for emissions unit P006

24.8 lbs MEK/day and 4.53 tons MEK/yr, for emissions unit P007

Applicable Compliance Methods:

Compliance with the daily allowable MEK emission limitations identified above shall be demonstrated by the recordkeeping requirements specified in d)(1).

If required, compliance with allowable emission limitations shall be determined by stack testing conducted in accordance with Methods 18, 25, or 25A, as appropriate, of 40 CFR Part 60, Appendix A.

The annual emission limitations were established by multiplying the daily allowable limits by 365 days per year, and dividing by 2000 pounds per ton. Therefore, compliance with the annual limitations shall be demonstrated provided compliance is maintained with the daily limitations.

d. Emission Limitations:

0.10 lb PE/hr and 0.44 ton PE/yr, for emissions unit P006

0.10 lb PE/hr and 0.44 ton PE/yr, for emissions unit P007

Applicable Compliance Methods:

If required, compliance with the hourly allowable PE limitations identified above shall be determined by stack testing conducted in accordance with Methods 1 - 5 of 40 CFR Part 60, Appendix A.

The annual PE limitation was calculated by multiplying the hourly limitation by 8760 hours per year, and dividing by 2000 pounds per ton. Therefore, as long as compliance with the hourly limitation is maintained, compliance with the annual limitation shall be demonstrated.

e. Emission Limitations:

Visible PE from any stack shall not exceed 10% opacity as a 6-minute average

Applicable Compliance Methods:

If required, compliance with the opacity limitation identified above shall be determined by visible emission observations performed in accordance with Method 9 of 40 CFR Part 60, Appendix A.

f. Emission Limitations:

No visible PE shall be emitted from the building ventilation

Applicable Compliance Methods:

If required, compliance with the opacity limitation identified above shall be determined by visible emission observations performed in accordance with Method 22 of 40 CFR Part 60, Appendix A.

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g) Miscellaneous Requirements

(1) None.

4. Emissions Unit Group4: P009 and P011 (Toluene)

EU ID	Operations, Property and/or Equipment Description
P009	Mixer #14; High Speed Mixer, 30 HP
P011	Mill #40; Sand Mill, 16-gallon capacity

- 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)b., c)(2), c)(3), d)(1), and e)(3).
- 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), PTI 16-02442 issued 10/17/2006	Volatile Organic Compound (VOC) emissions shall not exceed: 5.25 lbs/day and 0.96 ton/yr, for emissions unit P009 5.25 lbs/day and 0.96 ton/yr, for emissions unit P011 Toluene emissions shall not exceed: 5.25 lbs/day and 0.96 ton/yr, for emissions unit P009 5.25 lbs/day and 0.96 ton/yr, for emissions unit P011 Particulate emissions (PE) shall not exceed: 0.10 lb/hr and 0.44 ton/yr, for emissions unit P009 0.10 lb/hr and 0.44 ton/yr, for emissions unit P011

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	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		The visible PE from any stack shall not exceed 10% opacity as a 6-minute average, and there shall be no visible PE emitted from the building ventilation. See b)(2)a. and c)(1)
b.	OAC rule 3745-31-05(D), Synthetic Minor to Avoid Title V	See c)(2) and c)(3)
c.	OAC rule 3745-17-07(A) and (B)	See b)(2)c.
d.	OAC rule 3745-17-08(A)	See b)(2)c.
e.	OAC rule 3745-17-11(B)	See b)(2)c.

(2) Additional Terms and Conditions

- a. The hourly and annual PE limitations were established to reflect the emissions unit's potentials to emit. Therefore, no additional monitoring, record keeping and/or reporting requirements are necessary to ensure compliance with these emission limitations.

If any proposed change, such as production capacity, operating procedures, process materials, control equipment, or anything else increases the emissions unit's potential to emit, the permittee shall apply for and obtain either a modification to the permit or a new final federally enforceable permit to install and operate (FEPTIO) prior to making the change.

- b. The facility-wide, federally enforceable emission limitations are based on the maximum annual production rate restrictions under c)(2) of this permit, and are being established for the purposes of avoiding Title V major source applicability.
- c. The requirements of this rule are less stringent than those established pursuant to OAC rule 3745-31-05(A)(3).

c) Operational Restrictions

- (1) The permittee shall properly install, operate, and maintain a closed-lid design for this emissions unit to contain and limit PE emissions, in accordance with the manufacturer's recommendations, instructions, and operating manuals, and to the extent possible with good engineering design.
- (2) The maximum annual coatings/adhesives production rate for each emissions unit shall not exceed the amounts specified in the following table based upon a rolling, 12-month summation of the production rates:

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Emissions Unit	Maximum Annual Production Limits (pounds)
P009	1,111,625
P011	84,280

- (3) To ensure federal enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the cumulative coatings/adhesives production rates specified in the following table:

Month(s)	Maximum Allowable Cumulative Production Limits (pounds)	
	P009	P011
1	222,025	12,740
1-2	333,225	25,480
1-3	444,425	33,880
1-4	555,625	42,280
1-5	666,825	50,680
1-6	778,025	59,080
1-7	889,225	67,480
1-8	1,000,425	75,880
1-9	1,111,625	84,280
1-10	1,111,625	84,280
1-11	1,111,625	84,280
1-12	1,111,625	84,280

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual production restriction shall be based upon a rolling, 12-month summation of the monthly production rates.

d) **Monitoring and/or Recordkeeping Requirements**

- (1) The permittee shall calculate and record the following information each month for this emissions unit:
- a. the coatings/adhesives production rate, in pounds;
 - b. the total calculated VOC emissions from all the coatings/adhesives produced, in pounds [i.e., the production rate in d)(1)a. multiplied by the following company-supplied evaporation rate/loss factor]

Emissions Unit	VOC Emission Factor (by weight)
P009	0.17%
P011	2.25%

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- c. the total calculated emissions for each individual HAP from all the coatings/adhesives produced, in pounds [i.e., the production rate in d)(1)a. multiplied by a company-supplied emission factor. The evaporation rate/loss factor for toluene is estimated at 1.00%, by weight.];
 - d. the total calculated emissions for all combined HAP, from all the coatings/adhesives produced, in pounds [i.e., the sum of the individual HAP emissions, from d)(1)c. for all HAP];
 - e. the number of the days the emissions unit was in operation;
 - f. the average daily VOC emissions, in pounds per day [i.e., the VOC emissions in d)(1)b. divided by the days of operation in d)(1)e.];
 - g. the average daily toluene emissions, in pounds per day [i.e., the toluene emissions in d)(1)c. divided by the days of operation in d)(1)e.]; and
 - h. the rolling, 12-month summation of coatings/adhesives production rate, in pounds.
- (2) For each day during which the permittee did not operate the closed-lid system to control PE from this emissions unit, the permittee shall maintain a record of such instance for this emissions unit.
- (3) The FEPTIO application for this emissions unit was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to this emissions unit 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. 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:
- a. 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):
 - i. 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
 - ii. STEL (short term exposure limit) 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.

- b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).
- c. 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:

$$TLV/10 \times 8/X \times 5/Y = 4 TLV/XY = MAGLC$$

- d. 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: Toluene

TLV (mg/m³): 188.4

Maximum Hourly Emission Rate (lbs/hr): 1.95

Predicted 1-Hour Maximum Ground Level Concentration (ug/m³): 3,255

MAGLC (ug/m³): 6,729

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).

- (4) Prior to making any physical changes to or changes in the method of operation of the emissions unit 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:
 - a. 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;
 - b. 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
 - c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "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.

(5) 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):

- a. 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.);
- b. the MAGLC for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the "Toxic Air Contaminant Statute, ORC 3704.03(F);
- c. a copy of the computer model runs that established the predicted 1-hour maximum ground level concentration, which demonstrated the emissions unit 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
- d. 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 the emissions unit or the materials applied.

(6) 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.

e) Reporting Requirements

(1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

(2) 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:

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- i. during the first 12 calendar months of operation following the issuance of this permit, all exceedances of the monthly cumulative coatings/adhesives production rate restrictions in c)(3); and
 - ii. beginning the first month following the first 12 calendar months of operation following the issuance of this permit, all exceedances of the rolling, 12-month coatings/adhesives production restrictions in c)(2).
- 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 quarter.

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 Ohio EPA district office or local air agency).

- (3) 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 12 months for each air contaminant source identified in this permit.

The permittee shall include in the PER any changes made to a parameter or value used in the dispersion model, that was used to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. If no changes to the emissions, emissions unit, or the exhaust stack have been made, then the report shall include a statement to this effect.

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:

5.25 lbs VOC/day and 0.96 ton VOC/yr, for emissions unit P009

5.25 lbs VOC/day and 0.96 ton VOC/yr, for emissions unit P011

Applicable Compliance Methods:

Compliance with the daily allowable VOC emission limitations identified above shall be demonstrated by the recordkeeping requirements specified in d)(1).

If required, compliance with allowable emission limitations shall be determined by stack testing conducted in accordance with Methods 18, 25, or 25A, as appropriate, of 40 CFR Part 60, Appendix A.

The annual emission limitations were established by multiplying the daily allowable limits by 365 days per year, and dividing by 2000 pounds per ton. Therefore, compliance with the annual limitations shall be demonstrated provided compliance is maintained with the daily limitations.

b. Emission Limitations:

5.25 lbs toluene/day and 0.96 ton toluene/yr, for emissions unit P009

5.25 lbs toluene/day and 0.96 ton toluene/yr, for emissions unit P011

Applicable Compliance Methods:

Compliance with the daily allowable toluene emission limitations identified above shall be demonstrated by the recordkeeping requirements specified in d)(1).

If required, compliance with allowable emission limitations shall be determined by stack testing conducted in accordance with Methods 18, 25, or 25A, as appropriate, of 40 CFR Part 60, Appendix A.

The annual emission limitations were established by multiplying the daily allowable limits by 365 days per year, and dividing by 2000 pounds per ton. Therefore, compliance with the annual limitations shall be demonstrated provided compliance is maintained with the daily limitations.

c. Emission Limitations:

0.10 lb PE/hr and 0.44 ton PE/yr, for emissions unit P009

0.10 lb PE/hr and 0.44 ton PE/yr, for emissions unit P011

Applicable Compliance Methods:

If required, compliance with the hourly allowable PE limitations identified above shall be determined by stack testing conducted in accordance with Methods 1 - 5 of 40 CFR Part 60, Appendix A.

The annual PE limitation was calculated by multiplying the hourly limitation by 8760 hours per year, and dividing by 2000 pounds per ton. Therefore, as long as compliance with the hourly limitation is maintained, compliance with the annual limitation shall be demonstrated.

d. Emission Limitations:

Visible PE from any stack shall not exceed 10% opacity as a 6-minute average

Applicable Compliance Methods:

If required, compliance with the opacity limitation identified above shall be determined by visible emission observations performed in accordance with Method 9 of 40 CFR Part 60, Appendix A.

e. Emission Limitations:

No visible PE shall be emitted from the building ventilation

Applicable Compliance Methods:

If required, compliance with the opacity limitation identified above shall be determined by visible emission observations performed in accordance with Method 22 of 40 CFR Part 60, Appendix A.

g) Miscellaneous Requirements

(1) None.

5. Emissions Unit Group 5: P008,P021, and P022 (Trimethylbenzene)

EU ID	Operations, Property and/or Equipment Description
P008	Mixer #20; High Speed Mixer, 30 HP
P021	Mixer #1; High Speed Mixer, 10 HP
P022	Mill #33; Sand Mill, 8-gallon capacity

- 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)b., c)(2), c)(3), d)(1), and e)(3).
- 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), PTI 16-02442 issued 10/17/2006	Volatile Organic Compound (VOC) emissions shall not exceed: 15.8 lbs/day and 2.89 tons/yr, for emissions unit P008 4.0 lbs/day and 0.73 ton/yr, for emissions unit P021 4.0 lbs/day and 0.73 ton/yr, for emissions unit P022 Trimethylbenzene emissions shall not exceed: 6.64 lbs/day and 1.22 tons/yr, for emissions unit P008 1.68 lbs/day and 0.31 ton/yr, for emissions unit P021 1.68 lbs/day and 0.31 ton/yr, for emissions

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	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		unitP022 Particulate emissions (PE) shall not exceed: 0.10 lb/hr and 0.44 ton/yr, for emissions unitP008 0.10 lb/hr and 0.44 ton/yr, for emissions unitP021 0.10 lb/hr and 0.44 ton/yr, for emissions unitP022 The visible PE from any stack shall not exceed 10% opacity as a 6-minute average, and there shall be no visible PE emitted from the building ventilation. See b)(2)a. and c)(1)
b.	OAC rule 3745-31-05(D), Synthetic Minor to Avoid Title V	See c)(2) and c)(3)
c.	OAC rule 3745-17-07(A) and (B)	See b)(2)c.
d.	OAC rule 3745-17-08(A)	See b)(2)c.
e.	OAC rule 3745-17-11(B)	See b)(2)c.

(2) Additional Terms and Conditions

- a. The hourly and annual PE limitations were established to reflect the emissions unit's potential to emit. Therefore, no additional monitoring, record keeping and/or reporting requirements are necessary to ensure compliance with these emission limitations.

 If any proposed change, such as production capacity, operating procedures, process materials, control equipment, or anything else increases the emissions unit's potential to emit, the permittee shall apply for and obtain either a modification to the permit or a new final federally enforceable permit to install and operate (FEPTIO) prior to making the change.
- b. The facility-wide, federally enforceable emission limitations are based on the maximum annual production rate restrictions under c)(2) of this permit, and are being established for the purposes of avoiding Title V major source applicability.
- c. The requirements of this rule are less stringent than those established pursuant to OAC rule 3745-31-05(A)(3).

c) Operational Restrictions

- (1) The permittee shall properly install, operate, and maintain a closed-lid design for this emissions unit to contain and limit PE emissions, in accordance with the manufacturer's recommendations, instructions, and operating manuals, and to the extent possible with good engineering design.
- (2) The maximum annual coatings/adhesives production rate for each emissions unit shall not exceed the amounts specified in the following table based upon a rolling, 12-month summation of the production rates:

Emissions Unit	Maximum Annual Production Limits (pounds)
P008	503,360
P021	394,200
P022	394,200

- (3) To ensure federal enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the cumulative coatings/adhesives production rates specified in the following table:

Month(s)	Maximum Allowable Cumulative Production Limits (pounds)		
	P008	P021	P022
1	76,680	41,100	41,100
1-2	153,360	82,200	82,200
1-3	203,360	121,200	121,200
1-4	253,360	160,200	160,200
1-5	303,360	199,200	199,200
1-6	353,360	277,200	277,200
1-7	403,360	316,200	316,200
1-8	453,360	355,200	355,200
1-9	503,360	394,200	394,200
1-10	503,360	394,200	394,200
1-11	503,360	394,200	394,200
1-12	503,360	394,200	394,200

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual production restriction shall be based upon a rolling, 12-month summation of the monthly production rates.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall calculate and record the following information each month for this emissions unit:

- a. the coatings/adhesives production rate, in pounds;
- b. the total calculated VOC emissions from all the coatings/adhesives produced, in pounds [i.e., the production rate in d)(1)a. multiplied by the following company-supplied evaporation rate/loss factor]

Emissions Unit	VOC Emission Factor (by weight)
P008	1.15%
P021	0.37%
P022	0.37%

- c. the total calculated emissions for each individual HAP from all the coatings/adhesives produced, in pounds [i.e., the production rate in d)(1)a. multiplied by a company-supplied emission factor. The evaporation rate/loss factor for Trimethylbenzene is estimated at 0.42%, by weight.];
- d. the total calculated emissions for all combined HAP, from all the coatings/adhesives produced, in pounds [i.e., the sum of the individual HAP emissions, from d)(1)c. for all HAP];
- e. the number of the days the emissions unit was in operation;
- f. the average daily VOC emissions, in pounds per day [i.e., the VOC emissions in d)(1)b. divided by the days of operation in d)(1)e.];
- g. the average daily Trimethylbenzene emissions, in pounds per day [i.e., the Trimethylbenzene emissions in d)(1)c. divided by the days of operation in d)(1)e.]; and
- h. the rolling, 12-month summation of coatings/adhesives production rate, in pounds.

(2) For each day during which the permittee did not operate the closed-lid system to control PE from this emissions unit, the permittee shall maintain a record of such instance for this emissions unit.

(3) The FEPTIO application for this emissions unit was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to this emissions unit 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. 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:

- a. 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):
 - i. 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
 - ii. STEL (short term exposure limit) 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.
- b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).
- c. 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:
$$TLV/10 \times 8/X \times 5/Y = 4 TLV/XY = MAGLC$$
- d. 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: Trimethylbenzene
TLV (mg/m3): 122.9
Maximum Hourly Emission Rate (lbs/hr): 0.93
Predicted 1-Hour Maximum Ground Level Concentration (ug/m3): 1,550
MAGLC (ug/m3): 4,389

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).

- (4) Prior to making any physical changes to or changes in the method of operation of the emissions unit 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

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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:

- a. 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;
- b. 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
- c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "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.

- (5) 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):
 - a. 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.);
 - b. the MAGLC for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F);
 - c. a copy of the computer model runs that established the predicted 1-hour maximum ground level concentration, which demonstrated the emissions unit 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
 - d. 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 the emissions unit or the materials applied.

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- (6) 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.

e) Reporting Requirements

- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

- (2) 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. during the first 12 calendar months of operation following the issuance of this permit, all exceedances of the monthly cumulative coatings/adhesives production rate restrictions in c)(3); and
 - ii. beginning the first month following the first 12 calendar months of operation following the issuance of this permit, all exceedances of the rolling, 12-month coatings/adhesives production restrictions in c)(2).
- 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 quarter.

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 Ohio EPA district office or local air agency).

- (3) 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 12 months for each air contaminant source identified in this permit.

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

ground-level concentration. If no changes to the emissions, emissions unit, or the exhaust stack have been made, then the report shall include a statement to this effect.

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:

15.8 lbs VOC/day and 2.89 tons VOC/yr, for emissions unitP008

4.0 lbs VOC/day and 0.73 ton VOC/yr, for emissions unitP021

4.0 lbs VOC/day and 0.73 ton VOC/yr, for emissions unitP022

Applicable Compliance Methods:

Compliance with the daily allowable VOC emission limitations identified above shall be demonstrated by the recordkeeping requirements specified in d)(1).

If required, compliance with allowable emission limitations shall be determined by stack testing conducted in accordance with Methods 18, 25, or 25A, as appropriate, of 40 CFR Part 60, Appendix A.

The annual emission limitations were established by multiplying the daily allowable limits by 365 days per year, and dividing by 2000 pounds per ton. Therefore, compliance with the annual limitations shall be demonstrated provided compliance is maintained with the daily limitations.

b. Emission Limitations:

6.64 lbsTrimethylbenzene/day and 1.22 tons Trimethylbenzene/yr, for emissions unitP008

1.68 lbsTrimethylbenzene/day and 0.31 ton Trimethylbenzene/yr, for emissions unitP021

1.68 lbsTrimethylbenzene/day and 0.31 ton Trimethylbenzene/yr, for emissions unitP022

Applicable Compliance Methods:

Compliance with the daily allowable Trimethylbenzene emission limitations identified above shall be demonstrated by the recordkeeping requirements specified in d)(1).

If required, compliance with allowable emission limitations shall be determined by stack testing conducted in accordance with Methods 18, 25, or 25A, as appropriate, of 40 CFR Part 60, Appendix A.

The annual emission limitations were established by multiplying the daily allowable limits by 365 days per year, and dividing by 2000 pounds per ton.

Therefore, compliance with the annual limitations shall be demonstrated provided compliance is maintained with the daily limitations.

c. Emission Limitations:

0.10 lb PE/hr and 0.44 ton PE/yr, for emissions unitP008

0.10 lb PE/hr and 0.44 ton PE/yr, for emissions unitP022

0.10 lb PE/hr and 0.44 ton PE/yr, for emissions unitP022

Applicable Compliance Methods:

If required, compliance with the hourly allowable PE limitations identified above shall be determined by stack testing conducted in accordance with Methods 1 - 5 of 40 CFR Part 60, Appendix A.

The annual PE limitation was calculated by multiplying the hourly limitation by 8760 hours per year, and dividing by 2000 pounds per ton. Therefore, as long as compliance with the hourly limitation is maintained, compliance with the annual limitation shall be demonstrated.

d. Emission Limitations:

Visible PE from any stack shall not exceed 10% opacity as a 6-minute average

Applicable Compliance Methods:

If required, compliance with the opacity limitation identified above shall be determined by visible emission observations performed in accordance with Method 9 of 40 CFR Part 60, Appendix A.

e. Emission Limitations:

No visible PE shall be emitted from the building ventilation

Applicable Compliance Methods:

If required, compliance with the opacity limitation identified above shall be determined by visible emission observations performed in accordance with Method 22 of 40 CFR Part 60, Appendix A.

g) Miscellaneous Requirements

(1) None.

6. Emissions Unit Group 6: P012 (Trimethylbenzene, Naphthalene)

EU ID	Operations, Property and/or Equipment Description
P012	Mixer #21; High Speed Mixer, 40 HP

- 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)b., c)(2), c)(3), d)(1), and e)(3).
- 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), PTI 16-02442 issued 10/17/2006	Volatile Organic Compound (VOC) emissions shall not exceed 17.95 lbs/day and 3.28 tons/yr. Trimethylbenzene emissions shall not exceed 0.75 lb/day and 0.13 ton/yr. Naphthalene emissions shall not exceed 1.80 lbs/day and 0.33 ton/yr. Particulate emissions (PE) shall not exceed 0.10 lb/hr and 0.44 ton/yr. The visible PE from any stack shall not exceed 10% opacity as a 6-minute average, and there shall be no visible PE emitted from the building ventilation. See b)(2)a. and c)(1)
b.	OAC rule 3745-31-05(D),	See c)(2) and c)(3)

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	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	Synthetic Minor to Avoid Title V	
c.	OAC rule 3745-17-07(A) and (B)	See b)(2)c.
d.	OAC rule 3745-17-08(A)	See b)(2)c.
e.	OAC rule 3745-17-11(B)	See b)(2)c.

(2) Additional Terms and Conditions

- a. The hourly and annual PE limitations were established to reflect the emissions unit's potential to emit. Therefore, no additional monitoring, record keeping and/or reporting requirements are necessary to ensure compliance with these emission limitations.

If any proposed change, such as production capacity, operating procedures, process materials, control equipment, or anything else increases the emissions unit's potential to emit, the permittee shall apply for and obtain either a modification to the permit or a new final federally enforceable permit to install and operate (FEPTIO) prior to making the change.

- b. The facility-wide, federally enforceable emission limitations are based on the maximum annual production rate restrictions under c)(2) of this permit, and are being established for the purposes of avoiding Title V major source applicability.
- c. The requirements of this rule are less stringent than those established pursuant to OAC rule 3745-31-05(A)(3).

c) Operational Restrictions

- (1) The permittee shall properly install, operate, and maintain a closed-lid design for this emissions unit to contain and limit PE emissions, in accordance with the manufacturer's recommendations, instructions, and operating manuals, and to the extent possible with good engineering design.
- (2) The maximum annual coatings/adhesives production rate for this emissions unit shall not exceed 2,683,200 pounds, based upon a rolling, 12-month summation of the production rates.
- (3) To ensure federal enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the cumulative coatings/adhesives production rates specified in the following table:

Month(s)	Maximum Allowable Cumulative Production Limits (pounds)
1	371,600
1-2	743,200
1-3	1,027,200

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1-4	1,311,200
1-5	1,595,200
1-6	1,879,200
1-7	2,147,200
1-8	2,415,200
1-9	2,683,200
1-10	2,683,200
1-11	2,683,200
1-12	2,683,200

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual production restriction shall be based upon a rolling, 12-month summation of the monthly production rates.

d) **Monitoring and/or Recordkeeping Requirements**

- (1) The permittee shall calculate and record the following information each month for this emissions unit:
 - a. the coatings/adhesives production rate, in pounds;
 - b. the total calculated VOC emissions from all the coatings/adhesives produced, in pounds [i.e., the production rate in d)(1)a. multiplied by a company-supplied evaporation rate/loss factor of 0.24%, by weight];
 - c. the total calculated emissions for each individual HAP from all the coatings/adhesives produced, in pounds [i.e., the production rate in d)(1)a. multiplied by a company-supplied emission factor. The evaporation rates/loss factors for Trimethylbenzene and naphthalene are estimated at 0.04% and 0.10%, by weight, respectively.];
 - d. the total calculated emissions for all combined HAP, from all the coatings/adhesives produced, in pounds [i.e., the sum of the individual HAP emissions, from d)(1)c. for all HAP];
 - e. the number of the days the emissions unit was in operation;
 - f. the average daily VOC emissions, in pounds per day [i.e., the VOC emissions in d)(1)b. divided by the days of operation in d)(1)e.];
 - g. the average daily Trimethylbenzene emissions, in pounds per day [i.e., the Trimethylbenzene emissions in d)(1)c. divided by the days of operation in d)(1)e.];
 - h. the average daily naphthalene emissions, in pounds per day [i.e., the naphthalene emissions in d)(1)c. divided by the days of operation in d)(1)e.]; and

- i. the rolling, 12-month summation of coatings/adhesives production rate, in pounds.
- (2) For each day during which the permittee did not operate the closed-lid system to control PE from this emissions unit, the permittee shall maintain a record of such instance for this emissions unit.
 - (3) The FEPTIO application for this emissions unit was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to this emissions unit 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. 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:
 - a. 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):
 - i. 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
 - ii. STEL (short term exposure limit) 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.
 - b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).
 - c. 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:
$$\text{TLV}/10 \times 8/X \times 5/Y = 4 \text{ TLV}/XY = \text{MAGLC}$$
 - d. 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: Trimethylbenzene

TLV (mg/m3): 122.9

Maximum Hourly Emission Rate (lbs/hr): 0.93

Predicted 1-Hour Maximum Ground Level Concentration (ug/m3): 1,550

MAGLC (ug/m3): 4,389

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).

- (4) Prior to making any physical changes to or changes in the method of operation of the emissions unit 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:
- a. 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;
 - b. 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
 - c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "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.

- (5) 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):
- a. 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.);

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- b. the MAGLC for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the "Toxic Air Contaminant Statute, ORC 3704.03(F);
 - c. a copy of the computer model runs that established the predicted 1-hour maximum ground level concentration, which demonstrated the emissions unit 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
 - d. 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 the emissions unit or the materials applied.
- (6) 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.
- e) Reporting Requirements
- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.
 - (2) The permittee shall submit notification for any day when the closed-lid system was not used to control PE when this emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the Director (appropriate Ohio EPA district office or local air agency) within 30 days after the deviation occurs.
 - (3) 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. during the first 12 calendar months of operation following the issuance of this permit, all exceedances of the monthly cumulative coatings/adhesives production rate restrictions in c)(3); and
 - ii. beginning the first month following the first 12 calendar months of operation following the issuance of this permit, all exceedances of the rolling, 12-month coatings/adhesives production restriction in c)(2).
 - 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 quarter.

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 Ohio EPA district office or local air agency).

(4) 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 12 months for each air contaminant source identified in this permit.

The permittee shall include in the PER any changes made to a parameter or value used in the dispersion model, that was used to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. If no changes to the emissions, emissions unit, or the exhaust stack have been made, then the report shall include a statement to this effect.

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:

17.95 lbs VOC/day and 3.28 tons VOC/yr, for emissions unit P012

Applicable Compliance Methods:

Compliance with the daily allowable VOC emission limitations identified above shall be demonstrated by the recordkeeping requirements specified in d)(1).

If required, compliance with allowable emission limitations shall be determined by stack testing conducted in accordance with Methods 18, 25, or 25A, as appropriate, of 40 CFR Part 60, Appendix A.

The annual emission limitations were established by multiplying the daily allowable limits by 365 days per year, and dividing by 2000 pounds per ton. Therefore, compliance with the annual limitations shall be demonstrated provided compliance is maintained with the daily limitations.

b. Emission Limitations:

0.75 lb Trimethylbenzene/day and 0.13 ton Trimethylbenzene/yr, for emissions unit P012

Applicable Compliance Methods:

Compliance with the daily allowable Trimethylbenzene emission limitations identified above shall be demonstrated by the recordkeeping requirements specified in d)(1).

If required, compliance with allowable emission limitations shall be determined by stack testing conducted in accordance with Methods 18, 25, or 25A, as appropriate, of 40 CFR Part 60, Appendix A.

The annual emission limitations were established by multiplying the daily allowable limits by 365 days per year, and dividing by 2000 pounds per ton. Therefore, compliance with the annual limitations shall be demonstrated provided compliance is maintained with the daily limitations.

c. Emission Limitations:

1.80 lbs naphthalene/day and 0.33 ton naphthalene/yr, for emissions unitP012

Applicable Compliance Methods:

Compliance with the daily allowable naphthalene emission limitations identified above shall be demonstrated by the recordkeeping requirements specified in d)(1).

If required, compliance with allowable emission limitations shall be determined by stack testing conducted in accordance with Methods 18, 25, or 25A, as appropriate, of 40 CFR Part 60, Appendix A.

The annual emission limitations were established by multiplying the daily allowable limits by 365 days per year, and dividing by 2000 pounds per ton. Therefore, compliance with the annual limitations shall be demonstrated provided compliance is maintained with the daily limitations.

d. Emission Limitations:

0.10 lb PE/hr and 0.44 ton PE/yr, for emissions unitP012

Applicable Compliance Methods:

If required, compliance with the hourly allowable PE limitations identified above shall be determined by stack testing conducted in accordance with Methods 1 - 5 of 40 CFR Part 60, Appendix A.

The annual PE limitation was calculated by multiplying the hourly limitation by 8760 hours per year, and dividing by 2000 pounds per ton. Therefore, as long as compliance with the hourly limitation is maintained, compliance with the annual limitation shall be demonstrated.

e. Emission Limitations:

Visible PE from any stack shall not exceed 10% opacity as a 6-minute average

Applicable Compliance Methods:

If required, compliance with the opacity limitation identified above shall be determined by visible emission observations performed in accordance with Method 9 of 40 CFR Part 60, Appendix A.

f. Emission Limitations:

No visible PE shall be emitted from the building ventilation

Applicable Compliance Methods:

If required, compliance with the opacity limitation identified above shall be determined by visible emission observations performed in accordance with Method 22 of 40 CFR Part 60, Appendix A.

g) Miscellaneous Requirements

(1) None.

7. Emissions Unit Group7: P020 (VM & P Naphtha)

EU ID	Operations, Property and/or Equipment Description
P020	Mixer #3; High Speed Mixer, 10 HP

- 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)b., c)(2), c)(3), d)(1), and e)(3).
- 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), PTI 16-02442 issued 10/17/2006	Volatile Organic Compound (VOC) emissions shall not exceed 9.90 lbs/day and 1.81 tons/yr. VM & P Naphtha emissions shall not exceed 9.90 lbs/day and 1.81 tons/yr. Particulate emissions (PE) shall not exceed 0.10 lb/hr and 0.44 ton/yr. The visible PE from any stack shall not exceed 10% opacity as a 6-minute average, and there shall be no visible PE emitted from the building ventilation. See b)(2)a. and c)(1)
b.	OAC rule 3745-31-05(D), Synthetic Minor to Avoid Title V	See c)(2) and c)(3)
c.	OAC rule 3745-17-07(A) and (B)	See b)(2)c.

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	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
d.	OAC rule 3745-17-08(A)	See b)(2)c.
e.	OAC rule 3745-17-11(B)	See b)(2)c.

(2) Additional Terms and Conditions

a. The hourly and annual PE limitations were established to reflect the emissions unit's potentials to emit. Therefore, no additional monitoring, record keeping and/or reporting requirements are necessary to ensure compliance with these emission limitations.

If any proposed change, such as production capacity, operating procedures, process materials, control equipment, or anything else increases the emissions unit's potential to emit, the permittee shall apply for and obtain either a modification to the permit or a new final federally enforceable permit to install and operate (FEPTIO) prior to making the change.

b. The facility-wide, federally enforceable emission limitations are based on the maximum annual production rate restrictions under c)(2) of this permit, and are being established for the purposes of avoiding Title V major source applicability.

c. The requirements of this rule are less stringent than those established pursuant to OAC rule 3745-31-05(A)(3).

c) Operational Restrictions

(1) The permittee shall properly install, operate, and maintain a closed-lid design for this emissions unit to contain and limit PE emissions, in accordance with the manufacturer's recommendations, instructions, and operating manuals, and to the extent possible with good engineering design.

(2) The maximum annual coatings/adhesives production rate for this emissions unit shall not exceed 3,536,485 pounds, based upon a rolling, 12-month summation of the production rates.

(3) To ensure federal enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the cumulative coatings/adhesives production rates specified in the following table:

Month(s)	Maximum Allowable Cumulative Production Limits (pounds)
1	522,743
1-2	1,065,485
1-3	1,418,485
1-4	1,771,485
1-5	2,124,485

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1-6	2,477,385
1-7	2,830,385
1-8	3,183,385
1-9	3,536,485
1-10	3,536,485
1-11	3,536,485
1-12	3,536,485

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual production restriction shall be based upon a rolling, 12-month summation of the monthly production rates.

d) **Monitoring and/or Recordkeeping Requirements**

- (1) The permittee shall calculate and record the following information each month for this emissions unit:
 - a. the coatings/adhesives production rate, in pounds;
 - b. the total calculated VOC emissions from all the coatings/adhesives produced, in pounds [i.e., the production rate in d)(1)a. multiplied by a company-supplied evaporation rate/loss factor of 0.10%, by weight];
 - c. the total calculated emissions for each individual HAP from all the coatings/adhesives produced, in pounds [i.e., the production rate in d)(1)a. multiplied by a company-supplied emission factor. The evaporation rate/loss factor for VM & P Naphtha is estimated at 1.00%, by weight.];
 - d. the total calculated emissions for all combined HAP, from all the coatings/adhesives produced, in pounds [i.e., the sum of the individual HAP emissions, from d)(1)c. for all HAP];
 - e. the number of the days the emissions unit was in operation;
 - f. the average daily VOC emissions, in pounds per day [i.e., the VOC emissions in d)(1)b. divided by the days of operation in d)(1)e.];
 - g. the average daily VM & P Naphtha emissions, in pounds per day [i.e., the VM & P Naphtha emissions in d)(1)c. divided by the days of operation in d)(1)e.]; and
 - h. the rolling, 12-month summation of coatings/adhesives production rate, in pounds.
- (2) For each day during which the permittee did not operate the closed-lid system to control PE from this emissions unit, the permittee shall maintain a record of such instance for this emissions unit.

(3) The FEPTIO application for this emissions unit was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to this emissions unit 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. 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:

a. 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):

i. 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

ii. STEL (short term exposure limit) 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.

b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).

c. 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:

$$TLV/10 \times 8/X \times 5/Y = 4 TLV/XY = MAGLC$$

d. 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: VM & P Naphtha

TLV (mg/m3): 1,398.8

Maximum Hourly Emission Rate (lbs/hr): 0.62

Predicted 1-Hour Maximum Ground Level Concentration (ug/m3): 1,033

MAGLC (ug/m3): 49,956

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).

- (4) Prior to making any physical changes to or changes in the method of operation of the emissions unit 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:
- a. 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;
 - b. 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
 - c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "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.

- (5) 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):
- a. 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.);
 - b. the MAGLC for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the "Toxic Air Contaminant Statute, ORC 3704.03(F);

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- c. a copy of the computer model runs that established the predicted 1-hour maximum ground level concentration, which demonstrated the emissions unit 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
 - d. 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 the emissions unit or the materials applied.
- (6) 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.
- e) Reporting Requirements
- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.
 - (2) 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. during the first 12 calendar months of operation following the issuance of this permit, all exceedances of the monthly cumulative coatings/adhesives production rate restrictions in c)(3); and
 - ii. beginning the first month following the first 12 calendar months of operation following the issuance of this permit, all exceedances of the rolling, 12-month coatings/adhesives production restriction in c)(2).
 - 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 quarter.

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 Ohio EPA district office or local air agency).

- (3) 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 12 months for each air contaminant source identified in this permit.

The permittee shall include in the PER any changes made to a parameter or value used in the dispersion model, that was used to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. If no changes to the emissions, emissions unit, or the exhaust stack have been made, then the report shall include a statement to this effect.

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:

9.90 lbs VOC/day and 1.81 tons VOC/yr, for emissions unitP020

Applicable Compliance Methods:

Compliance with the daily allowable VOC emission limitations identified above shall be demonstrated by the recordkeeping requirements specified in d)(1).

If required, compliance with allowable emission limitations shall be determined by stack testing conducted in accordance with Methods 18, 25, or 25A, as appropriate, of 40 CFR Part 60, Appendix A.

The annual emission limitations were established by multiplying the daily allowable limits by 365 days per year, and dividing by 2000 pounds per ton. Therefore, compliance with the annual limitations shall be demonstrated provided compliance is maintained with the daily limitations.

b. Emission Limitations:

9.90 lbs VM & P Naphtha/day and 1.81 tons VM & P Naphtha/yr, for emissions unitP020

Applicable Compliance Methods:

Compliance with the daily allowable VM & P Naphtha emission limitations identified above shall be demonstrated by the recordkeeping requirements specified in d)(1).

If required, compliance with allowable emission limitations shall be determined by stack testing conducted in accordance with Methods 18, 25, or 25A, as appropriate, of 40 CFR Part 60, Appendix A.

The annual emission limitations were established by multiplying the daily allowable limits by 365 days per year, and dividing by 2000 pounds per ton. Therefore, compliance with the annual limitations shall be demonstrated provided compliance is maintained with the daily limitations.

c. Emission Limitations:

0.10 lb PE/hr and 0.44 ton PE/yr, for emissions unit P020

Applicable Compliance Methods:

If required, compliance with the hourly allowable PE limitations identified above shall be determined by stack testing conducted in accordance with Methods 1 - 5 of 40 CFR Part 60, Appendix A.

d. The annual PE limitation was calculated by multiplying the hourly limitation by 8760 hours per year, and dividing by 2000 pounds per ton. Therefore, as long as compliance with the hourly limitation is maintained, compliance with the annual limitation shall be demonstrated.

e. Emission Limitations:

Visible PE from any stack shall not exceed 10% opacity as a 6-minute average

Applicable Compliance Methods:

If required, compliance with the opacity limitation identified above shall be determined by visible emission observations performed in accordance with Method 9 of 40 CFR Part 60, Appendix A.

f. Emission Limitations:

No visible PE shall be emitted from the building ventilation

Applicable Compliance Methods:

If required, compliance with the opacity limitation identified above shall be determined by visible emission observations performed in accordance with Method 22 of 40 CFR Part 60, Appendix A.

g) Miscellaneous Requirements

(1) None.

8. Emissions Unit Group8: P014,P015,P016,P017,P018,P019,P023, and P024 (Cyclohexanone)

EU ID	Operations, Property and/or Equipment Description
P014	Mixer #5; High Speed Mixer, 15 HP
P015	Mill #34; Sand Mill, 3-gallon capacity
P016	Mixer #9; High Speed Mixer, 25 HP
P017	Mill #35; Sand Mill, 8-gallon capacity
P018	Mixer #13; High Speed Mixer, 20 HP
P019	Mill #36; Sand Mill, 8-gallon capacity
P023	Mixer #18; High Speed Mixer, 30 HP
P024	Mill #37; Sand Mill, 8-gallon capacity

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)b., c)(2), c)(3), d)(1), and e)(3).

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), PTI 16-02442 issued 10/17/2006	Volatile Organic Compound (VOC) emissions shall not exceed: 6.41 lbs/day and 1.17 tons/yr, for emissions unitP014 6.41 lbs/day and 1.17 tons/yr, for emissions unitP015 4.64 lbs/day and 0.85 ton/yr, for emissions unitP016 4.64 lbs/day and 0.85 ton/yr, for emissions unitP017 4.81 lbs/day and 0.88 ton/yr, for emissions

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	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>unitP018 4.81 lbs/day and 0.88 ton/yr, for emissions</p> <p>unitP019 4.52 lbs/day and 0.82 ton/yr, for emissions</p> <p>unitP023 4.52 lbs/day and 0.82 ton/yr, for emissions</p> <p>unitP024 4.52 lbs/day and 0.82 ton/yr, for emissions</p> <p>Cyclohexanone emissions shall not exceed: 6.41 lbs/day and 1.17 tons/yr, for emissions</p> <p>unitP014 6.41 lbs/day and 1.17 tons/yr, for emissions</p> <p>unitP015 4.64 lbs/day and 0.85 ton/yr, for emissions</p> <p>unitP016 4.64 lbs/day and 0.85 ton/yr, for emissions</p> <p>unitP017 4.81 lbs/day and 0.88 ton/yr, for emissions</p> <p>unitP018 4.81 lbs/day and 0.88 ton/yr, for emissions</p> <p>unitP019 4.52 lbs/day and 0.82 ton/yr, for emissions</p> <p>unitP023 4.52 lbs/day and 0.82 ton/yr, for emissions</p> <p>unitP024 4.52 lbs/day and 0.82 ton/yr, for emissions</p> <p>Particulate emissions (PE) shall not exceed: 0.10 lb/hr and 0.44 ton/yr, for emissions unit P014 0.10 lb/hr and 0.44 ton/yr, for emissions unitP015 0.10 lb/hr and 0.44 ton/yr, for emissions unitP016 0.10 lb/hr and 0.44 ton/yr, for emissions unitP017 0.10 lb/hr and 0.44 ton/yr, for emissions unitP018 0.10 lb/hr and 0.44 ton/yr, for emissions unitP019 0.10 lb/hr and 0.44 ton/yr, for emissions unitP023 0.10 lb/hr and 0.44 ton/yr, for emissions unitP024</p>

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		The visible PE from any stack shall not exceed 10% opacity as a 6-minute average, and there shall be no visible PE emitted from the building ventilation. See b)(2)a. and c)(1)
b.	OAC rule 3745-31-05(D), Synthetic Minor to Avoid Title V	See c)(2) and c)(3)
c.	OAC rule 3745-17-07(A) and (B)	See b)(2)c.
d.	OAC rule 3745-17-08(A)	See b)(2)c.
e.	OAC rule 3745-17-11(B)	See b)(2)c.

(2) Additional Terms and Conditions

- a. The hourly and annual PE limitations were established to reflect the emissions unit's potential to emit. Therefore, no additional monitoring, record keeping and/or reporting requirements are necessary to ensure compliance with these emission limitations.

If any proposed change, such as production capacity, operating procedures, process materials, control equipment, or anything else increases the emissions unit's potential to emit, the permittee shall apply for and obtain either a modification to the permit or a new final federally enforceable permit to install and operate (FEPTIO) prior to making the change.

- b. The facility-wide, federally enforceable emission limitations are based on the maximum annual production rate restrictions under c)(2) of this permit, and are being established for the purposes of avoiding Title V major source applicability.
- c. The requirements of this rule are less stringent than those established pursuant to OAC rule 3745-31-05(A)(3).

c) Operational Restrictions

- (1) The permittee shall properly install, operate, and maintain a closed-lid design for this emissions unit to contain and limit PE emissions, in accordance with the manufacturer's recommendations, instructions, and operating manuals, and to the extent possible with good engineering design.
- (2) The maximum annual coatings/adhesives production rate for each emissions unit shall not exceed the amounts specified in the following table based upon a rolling, 12-month summation of the production rates:

Emissions Unit	Maximum Annual Production Limits (pounds)
P014	317,720
P015	317,720
P016	317,895
P017	317,895
P018	191,127
P019	191,127
P023	1,191,360
P024	1,191,360

- (3) To ensure federal enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the cumulative coatings/adhesives production rates specified in the following table:

Month(s)	Maximum Allowable Cumulative Production Limits (pounds)			
	P014, P015	P016, P017	P018, P019	P023, P024
1	46,860	46,860	29,064	178,704
1-2	93,720	93,720	58,127	297,360
1-3	125,720	125,720	77,127	416,360
1-4	157,720	157,720	96,127	535,360
1-5	189,720	189,720	115,127	654,360
1-6	221,720	221,720	134,127	773,360
1-7	253,720	253,720	153,127	892,360
1-8	285,720	285,720	172,127	1,011,360
1-9	317,720	317,895	191,127	1,130,360
1-10	317,720	317,895	191,127	1,191,360
1-11	317,720	317,895	191,127	1,191,360
1-12	317,720	317,895	191,127	1,191,360

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual production restriction shall be based upon a rolling, 12-month summation of the monthly production rates.

d) **Monitoring and/or Recordkeeping Requirements**

- (1) The permittee shall calculate and record the following information each month for this emissions unit:

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- a. the coatings/adhesives production rate, in pounds;
- b. the total calculated VOC emissions from all the coatings/adhesives produced, in pounds [i.e., the production rate in d)(1)a. multiplied by the following company-supplied evaporation rate/loss factor]

Emissions Unit	VOC Emission Factor (by weight)
P014	0.74%
P015	0.74%
P016	0.53%
P017	0.53%
P018	0.92%
P019	0.92%
P023	0.14%
P024	0.14%

- c. the total calculated emissions for each individual HAP from all the coatings/adhesives produced, in pounds [i.e., the production rate in d)(1)a. multiplied by a company-supplied emission factor. The evaporation rate/loss factor for Cyclohexanone is estimated at 1.00%, by weight.];
 - d. the total calculated emissions for all combined HAP, from all the coatings/adhesives produced, in pounds [i.e., the sum of the individual HAP emissions, from d)(1)c. for all HAP];
 - e. the number of the days the emissions unit was in operation;
 - f. the average daily VOC emissions, in pounds per day [i.e., the VOC emissions in d)(1)b. divided by the days of operation in d)(1)e.];
 - g. the average daily Cyclohexanone emissions, in pounds per day [i.e., the Cyclohexanone emissions in d)(1)c. divided by the days of operation in d)(1)e.]; and
 - h. the rolling, 12-month summation of coatings/adhesives production rate, in pounds.
- (2) For each day during which the permittee did not operate the closed-lid system to control PE from this emissions unit, the permittee shall maintain a record of such instance for this emissions unit.
- (3) The FEPTIO application for this emissions unit was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to this emissions unit 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. 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:

- a. 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):
 - i. 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
 - ii. STEL (short term exposure limit) 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.
 - b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).
 - c. 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:
- d. 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: Cyclohexanone

TLV (mg/m3): 96.3

Maximum Hourly Emission Rate (lbs/hr): 3.49

Predicted 1-Hour Maximum Ground Level Concentration (ug/m3): 2,405

MAGLC (ug/m3): 3,438

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).

- (4) Prior to making any physical changes to or changes in the method of operation of the emissions unit 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:
- a. 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;
 - b. 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
 - c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "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.

- (5) 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):
- a. 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.);
 - b. the MAGLC for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the "Toxic Air Contaminant Statute, ORC 3704.03(F);
 - c. a copy of the computer model runs that established the predicted 1-hour maximum ground level concentration, which demonstrated the emissions unit 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

- d. 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 the emissions unit or the materials applied.

- (6) 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.

e) Reporting Requirements

- (1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.
- (2) 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. during the first 12 calendar months of operation following the issuance of this permit, all exceedances of the monthly cumulative coatings/adhesives production rate restrictions in c)(3); and
 - ii. beginning the first month following the first 12 calendar months of operation following the issuance of this permit, all exceedances of the rolling, 12-month coatings/adhesives production restrictions in c)(2).
 - 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 quarter.

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 Ohio EPA district office or local air agency).

- (3) 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 12 months for each air contaminant source identified in this permit.

The permittee shall include in the PER any changes made to a parameter or value used in the dispersion model, that was used to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. If no changes to the emissions, emissions unit, or the exhaust stack have been made, then the report shall include a statement to this effect.

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:
- (2) 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:

- 6.41 lbs VOC/day and 1.17 tons VOC/yr, for emissions unit P014
- 6.41 lbs VOC/day and 1.17 tons VOC/yr, for emissions unit P015
- 4.64 lbs VOC/day and 0.85 ton VOC/yr, for emissions unit P016
- 4.64 lbs VOC/day and 0.85 ton VOC/yr, for emissions unit P017
- 4.81 lbs VOC/day and 0.88 ton VOC/yr, for emissions unit P018
- 4.81 lbs VOC/day and 0.88 ton VOC/yr, for emissions unit P019
- 4.52 lbs VOC/day and 0.82 ton VOC/yr, for emissions unit P023
- 4.52 lbs VOC/day and 0.82 ton VOC/yr, for emissions unit P024

Applicable Compliance Methods:

Compliance with the daily allowable VOC emission limitations identified above shall be demonstrated by the recordkeeping requirements specified in d)(1).

If required, compliance with allowable emission limitations shall be determined by stack testing conducted in accordance with Methods 18, 25, or 25A, as appropriate, of 40 CFR Part 60, Appendix A.

The annual emission limitations were established by multiplying the daily allowable limits by 365 days per year, and dividing by 2000 pounds per ton. Therefore, compliance with the annual limitations shall be demonstrated provided compliance is maintained with the daily limitations.

b. Emission Limitations:

- 6.41 lbs Cyclohexanone/day and 1.17 tons Cyclohexanone/yr, for emissions unit P014

6.41 lbsCyclohexanone/day and 1.17 tons Cyclohexanone/yr, for emissions unit P015

4.64 lbsCyclohexanone/day and 0.85 ton Cyclohexanone/yr, for emissions unit P016

4.64lbsCyclohexanone/day and 0.85 ton Cyclohexanone/yr, for emissions unit P017

4.81 lbsCyclohexanone/day and 0.88 ton Cyclohexanone/yr, for emissions unit P018

4.81 lbsCyclohexanone/day and 0.88 ton Cyclohexanone/yr, for emissions unit P019

4.52 lbsCyclohexanone/day and 0.82 ton Cyclohexanone/yr, for emissions unit P023

4.52 lbsCyclohexanone/day and 0.82 ton Cyclohexanone/yr, for emissions unit P024

Applicable Compliance Methods:

Compliance with the daily allowable Cyclohexanone emission limitations identified above shall be demonstrated by the recordkeeping requirements specified in d)(1).

If required, compliance with allowable emission limitations shall be determined by stack testing conducted in accordance with Methods 18, 25, or 25A, as appropriate, of 40 CFR Part 60, Appendix A.

The annual emission limitations were established by multiplying the daily allowable limits by 365 days per year, and dividing by 2000 pounds per ton. Therefore, compliance with the annual limitations shall be demonstrated provided compliance is maintained with the daily limitations.

c. Emission Limitations:

0.10 lb PE/hr and 0.44 ton PE/yr, for emissions unit P014

0.10 lb PE/hr and 0.44 ton PE/yr, for emissions unit P015

0.10 lb PE/hr and 0.44 ton PE/yr, for emissions unit P016

0.10 lb PE/hr and 0.44 ton PE/yr, for emissions unit P017

0.10 lb PE/hr and 0.44 ton PE/yr, for emissions unit P018

0.10 lb PE/hr and 0.44 ton PE/yr, for emissions unit P019

0.10 lb PE/hr and 0.44 ton PE/yr, for emissions unit P023

0.10 lb PE/hr and 0.44 ton PE/yr, for emissions unit P024

Applicable Compliance Methods:

If required, compliance with the hourly allowable PE limitations identified above shall be determined by stack testing conducted in accordance with Methods 1 - 5 of 40 CFR Part 60, Appendix A.

The annual PE limitation was calculated by multiplying the hourly limitation by 8760 hours per year, and dividing by 2000 pounds per ton. Therefore, as long as compliance with the hourly limitation is maintained, compliance with the annual limitation shall be demonstrated.

d. Emission Limitations:

Visible PE from any stack shall not exceed 10% opacity as a 6-minute average

Applicable Compliance Methods:

If required, compliance with the opacity limitation identified above shall be determined by visible emission observations performed in accordance with Method 9 of 40 CFR Part 60, Appendix A.

e. Emission Limitations:

No visible PE shall be emitted from the building ventilation

Applicable Compliance Methods:

If required, compliance with the opacity limitation identified above shall be determined by visible emission observations performed in accordance with Method 22 of 40 CFR Part 60, Appendix A.

g) Miscellaneous Requirements

(1) None.