09/21/2026

Brandon Murphy
FUSION INC PLANT TWO
4658 East 355th Street
Willoughby, OH 44094

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

RE: DRAFT AIR POLLUTION PERMIT-TO-INSTALL AND OPERATE
Facility ID: 0243161230
Permit Number: P0139329
Permit Type: Administrative Modification
County: Lake

Dear Permit Holder:

A draft of the Ohio Administrative Code (OAC) Chapter 3745-31 Air Pollution Permit-to-Install and Operate (PTIO) for the referenced facility has been issued for the emissions unit(s) listed in the Authorization section of the enclosed draft permit. This draft action is not an authorization to begin construction or modification of your emissions unit(s). The purpose of this draft is to solicit public comments on the permit. A public notice will appear in the Ohio Environmental Protection Agency Weekly Review and Public Notices website, ***Weekly Review and Public Notices***. A copy of the public notice and the draft permit are enclosed. This permit can be accessed electronically on the Ohio EPA document search webpage: ***eDocument Search | Ohio Environmental Protection Agency***. Comments will be accepted as a marked-up copy of the draft permit or in narrative format. Any comments must be sent to the following:

Andrea Moore
Permit Review/Development Section
Ohio EPA, DAPC
50 West Town Street Suite 700
PO Box 1049
Columbus, Ohio 43216-1049

and

Ohio EPA DAPC, Northeast District Office
2110 East Aurora Rd.
Twinsburg, OH 44087

Comments and/or a request for a public hearing will be accepted within 30 days of the date the notice appears on the Ohio EPA Weekly Review and Public Notices website, ***Weekly Review and Public Notices | Ohio Environmental Protection Agency***. You will be notified if a public hearing is scheduled. A decision on issuing a final permit-to-install will be made after consideration of comments received and oral testimony if a public hearing is conducted. Any permit fee that will be due upon issuance of a final Permit-to-Install is indicated in the Authorization section. Please do not submit any payment now. If you have any questions, please contact Ohio EPA DAPC, Northeast District Office at (330)963-1200.

Sincerely,

Robert Hodanbosi

Robert Hodanbosi
Chief, Division of Air Pollution Control

cc: U.S. EPA Region 5 Via E-Mail Notification
Ohio EPA-NEDO; Pennsylvania; Canada

PUBLIC NOTICE

The following matters are the subject of this public notice by the Ohio Environmental Protection Agency. The complete public notice, including any additional instructions for submitting comments, requesting information, a public hearing, or filing an appeal may be obtained at: ***Weekly Review and Public Notices | Ohio Environmental Protection Agency*** or Hearing Clerk, Ohio EPA, 50 W. Town St., Columbus, Ohio 43215. Ph: 614-644-3037 email: ***HClerk@epa.ohio.gov***

Draft Air Pollution Permit-to-Install and Operate Administrative Modification

FUSION INC PLANT TWO
4711 TOPPS INDUSTRIAL PKWY
Willoughby, OH 44094

ID#: P0139329
Date of Action: 09/21/2026
Permit Desc: Admin mod PTIO to implement EG 61 for the VOC emission limits to be modified to the actual emissions to 20% under the 100 TPY (less than 20 TPY VOC) threshold for the facility to remain NTV. Also, to include a federally enforceable limit to avoid VOC RACT per Engineering Guide 86.

The permit and complete instructions for requesting information or submitting comments may be obtained at: https://ohioepa.commentinput.com - Search by entering the permit #P0139329 in the "Search Projects" search box.

Permit Strategy Write-Up

1. Check all that apply:

   ☐ Synthetic Minor Determination

   ☐ Netting Determination

2. Source Description:

   Fusion Inc. Plant Two has powder operations and produces paste alloys used in brazing and soldering.

   P001, Soldering and brazing paste mix operations

   P002, Base solder paste making process equipment controlled by DC06, a 5,000 cfm baghouse.

   P005, Base chemicals mixers, scale and solder alloys related process equipment, controlled by DC07, a 9,200 cfm baghouse.

   As required by the reclassification to serious nonattainment for ozone under the 2015 ozone National Ambient Air Quality Standards (NAAQS) promulgated by U.S. EPA, the facility has agreed to a VOC Reasonably Available Control Technology (RACT) limit restriction under an OAC rule 3745-31-05(D) synthetic minor restriction to avoid VOC RACT. Section C of this permit cites the RACT limits under OAC Rule 3745-21-11(B) are being avoided.

3. Facility Emissions and Attainment Status:

   This is a non-Title V facility. Lake County was designated as "serious" nonattainment for the 2015 ozone NAAQS but is now a maintenance county. The county is currently designated attainment for all NAAQS (criteria) pollutants which include ozone, PM2.5, PM10, CO, NO2, lead and SO2.

4. Source Emissions:

   These EUs have a high PTE, but low actual emissions. Therefore, the company opted to use Engineering Guide 61. This limits the EUs to 20.0 TPY of VOC. There is also an OAC rule 3745-31-05(D) synthetic minor restriction to avoid VOC RACT of 49.9 TPY of VOC.

5. Conclusion:

   The permit modification establishes an Engineering Guide 61 - OAC rule 3745-31-05(E) limit that is more stringent than the OAC rule 3745-31-05(D) synthetic minor restriction to avoid VOC RACT, but both are included since one is state only enforceable and the other is federally enforceable.

6. Please provide additional notes or comments as necessary:

   None

7. Total Permit Allowable Emissions Summary (for informational purposes only):

Pollutant	Tons Per Year
VOC	20.0
PM	1.11

Ohio Environmental Protection Agency

DRAFT

Division of Air Pollution Control
Permit-to-Install and Operate
for
FUSION INC PLANT TWO

Facility ID:	0243161230
Permit Number:	P0139329
Permit Type:	Administrative Modification
Issued:	09/21/2026
Effective:	To be entered upon final issuance
Expiration:	To be entered upon final issuance

Ohio Environmental Protection Agency

Division of Air Pollution Control

Permit-to-Install and Operate

for

FUSION INC PLANT TWO

Table of Contents

Authorization

Facility ID:	0243161230
Application Number(s):	M0008514M0008514
Permit Number:	P0139329
Permit Description:	Admin mod PTIO to implement EG 61 for the VOC emission limits to be modified to the actual emissions to 20% under the 100 TPY (less than 20 TPY VOC) threshold for the facility to remain NTV. Also, to include a federally enforceable limit to avoid VOC RACT per Engineering Guide 86.
Permit Type:	Administrative Modification
Permit Fee:	$450.00 *DO NOT send payment at this time, subject to change before final issuance*
Issue Date:	09/21/2026
Effective Date:	To be entered upon final issuance
Expiration Date:	To be entered upon final issuance
Permit Evaluation Report (PER) Annual Date:	To be entered upon final issuance

This document constitutes issuance of a Permit-to-Install and Operate for the emissions unit(s) identified on the following page to:

FUSION INC PLANT TWO
4711 TOPPS INDUSTRIAL PKWY
Willoughby, OH 44094

Ohio Environmental Protection Agency (EPA) District Office or local air agency responsible for processing and administering your permit:

Ohio EPA DAPC, Northeast District Office
2110 East Aurora Rd.
Twinsburg, OH 44087
(330)963-1200

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

John Logue
Director

Authorization (continued)

Permit Number: P0139329

Permit Description: Admin mod PTIO to implement EG 61 for the VOC emission limits to be modified to the actual emissions to 20% under the 100 TPY (less than 20 TPY VOC) threshold for the facility to remain NTV. Also, to include a federally enforceable limit to avoid VOC RACT per Engineering Guide 86.

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

Emissions Unit ID:	**P001**
Company Equipment ID:	Soldering and brazing paste mix operations
Superseded Permit Number:	P0135315
General Permit Category and Type:	Not Applicable

Group Name:Mixing Operations

Emissions Unit ID:	**P002**
Company Equipment ID:	Soldering and brazing paste mix operations
Superseded Permit Number:	P0135315
General Permit Category and Type:	Not Applicable P0135315
Emissions Unit ID:	**P005**
Company Equipment ID:	Base chemicals mixers
Superseded Permit Number:	P0135315
General Permit Category and Type:	Not Applicable P0135315

List of Commonly Used Abbreviations

AP-42 = U.S. EPA's Compilation of Air Pollution Emissions Factors	HVLP = high volume, low pressure	PER = Permit Evaluation Report
ASTM = American Society for Testing and Materials	LAER = lowest achievable emission rate	PM = particulate matter
BACT = Best Available Control Technology	lb(s)/hr = pound(s) per hour	PM_{10} = particulate matter with an aerodynamic diameter less than or equal to 10 microns
BAT = Best Available Technology	LDAR = leak detection and repair	$PM_{2.5}$ = particulate matter with an aerodynamic diameter less than or equal to 2.5 microns
CAA = Clean Air Act	LPG = liquefied petroleum gas/propane	ppb = parts per billion
CAM = compliance assurance monitoring	MACT = maximum achievable control technology	ppm = parts per million
CEMS = continuous emissions monitoring system	MAGLC = maximum acceptable ground level concentration	PSD = Prevention of Significant Deterioration
CFC = chlorofluorocarbon	mg/m3 = milligrams per cubic meter	psi = pounds per square inch
CFR = Code of Federal Regulations	MM = million	psia = pounds per square inch absolute
CH_4 = methane	MMBtu = million British Thermal Units	PTE = potential-to-emit
CI = compression ignition	MSDS = material safety data sheet	PTI = Permit-to-Install
CO = carbon monoxide	MSW = municipal solid waste	PTIO = Permit-to-Install and Operate
CO_2 = carbon dioxide	NAAQS = National Ambient Air Quality Standard	PTO = Permit-to-Operate
COM = continuous opacity monitor	NESHAP = National Emission Standard for Hazardous Air Pollutants	PWR = process weight rate
DAPC = Division of Air Pollution Control	NG = natural gas	RACM = reasonably available control measures
DO/LAA = District Office/Local Air Agency	ng/m3 = nanograms per cubic meter	RACT = reasonably available control technology
dscf = dry standard cubic foot	NH_3 = ammonia	RATA = relative accuracy test audit
EAC = emissions activity category	NMHC = non-methane hydrocarbons	RTO = regenerative thermal oxidizer
eDocs = electronic documents database	NMOC = non-methane organic compound	SB265 = Senate Bill 265
ERAC = Environmental Review Appeals Commission	NO = nitrogen oxide	scfm = standard cubic feet per minute
ESP = electrostatic precipitator	NO_2 = nitrogen dioxide	SI = spark ignition
EU = emissions unit	NO_x = nitrogen oxides	SIP = State Implementation Plan
FEPTIO = Federally Enforceable Permit-to-Install and Operate	NSPS = New Source Performance Standard	SO_2 = sulfur dioxide
FER = Fee Emissions Report	NSR = New Source Review	SSMP = startup, shutdown, and malfunction plan
FR = Federal Register	NTV = Non-Title V	TDS = total dissolved solids
GACT = generally achievable control technology	O&M = operation and maintenance	TLV = threshold limit value
GHG = greenhouse gases	OAC = Ohio Administrative Code	TO = thermal oxidizer
gr/dscf = grains per dry standard cubic foot	OC = organic compound	TPH = ton(s) per hour
H_2S = hydrogen sulfide	Ohio EPA = Ohio Environmental Protection Agency	TPY = ton(s) per year
H_2SO_4 = sulfuric acid	ORC = Ohio Revised Code	TSP = total suspended particulates
HAP = hazardous air pollutant	Pb = lead	VE = visible emissions
HCl = hydrogen chloride	PBR = Permit-By-Rule	VMT = vehicle miles traveled
HF = hydrogen fluoride	PCB = polychlorinated biphenyl	VOC = volatile organic compound
Hg = mercury	PE = particulate emissions	WPP = work practice plan
hp = horsepower	PEMS = predictive emissions monitoring system	µg/m3 = micrograms per cubic meter

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:

a) 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.

b) 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. For facilities that are permitted as synthetic minor sources, the fee schedule is adjusted annually for inflation. 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 (either electronically through Ohio EPA's eBusiness Center: Air Services web service or 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 once by 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 permit evaluation report (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 of this permit 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 Ohio EPA DAPC, Northeast District Office 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/her 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 submitting 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 emission 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 shut down 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.

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, the new owner or operator must follow the procedures in OAC Chapter 3745-31-07, including notifying Ohio EPA or the local air agency of the change in ownership or operator within thirty days of the transfer date. Any transferee of this permit shall assume the responsibilities of the transferor permit holder.

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

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

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

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

B. Facility-Wide Terms and Conditions

1. This permit document constitutes a PTI issued in accordance with ORC 3704.03(F) and a PTO issued in accordance with ORC 3704.03(G).

   a) For the purpose of a PTI document, the facility-wide T&C identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) See B.2. – B.6.

b) For the purpose of a PTO document, the facility-wide T&C identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

(1) See B.7. – B.12.

2. The potential emissions of VOC from this facility exceed the major source threshold of 100 TPY. In order to have NTV permitting status, the permittee has elected to use presumed inherent physical limitations per Ohio EPA's Engineering Guide #61 by maintaining actual emissions records showing that the annual facility-wide emissions of VOC are less than 20 percent of the major source threshold or 20.0 tons per rolling, 12-month period.

3. The permittee shall collect and record the following information each month for all emissions unit(s), "de minimis" and permit exempt emission units [PBR, OAC rule 3745-31-03, etc.], combined:

a) The calculated emissions of VOC, in tons; and

b) The annual year to date emissions of VOC, in tons [summation of B.3.a. for each month to date from January to December].

Note: The above records shall be determined in accordance with the emissions calculations presented to the Ohio EPA in permit application #M0008514, received on 12/17/2025.

4. The permittee shall submit a report that identifies the actual facility-wide emissions of VOC for the previous calendar year by no later than February 15th of each year. This information can be included in the "Additional Information" section of the PER for the previous calendar year if the PER is required to be submitted by February 15th of each year

5. The permittee shall notify the Director (NEDO) in writing of any monthly records showing that the actual facility-wide emissions of VOC have exceeded 20 percent of the major source threshold of 100 tons per rolling, 12-month period. The notification shall include a copy of each record showing the exceedance and it shall be sent to the NEDO within 30 days following the end of the calendar month during which the exceedance occurred.

6. The permittee will have 90 days after reporting the exceedance in B.5 to submit either a FEPTIO or Title V permit application.

7. Facility-Wide VOC Emissions Restrictions

a) Facility-wide VOC emissions from this facility including de minimis and/or exempt sources, shall not exceed the following listed limitation:

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
(1)	OAC rule 3745-31-05(D) [Federally Enforceable Requirements to avoid OAC rule 3745-21-11(B)]	VOC emissions shall not exceed 49.9 tons per rolling, 12-month period. See B.8.

8. The permittee shall not produce more than 12,900,000 lbs of paste and 5,850,000 lbs of base per rolling, 12-month period, in this facility.

9. The permittee shall collect and record the following information monthly for the entire facility:

   a) The company identification of each solvent employed;

   b) The VOC content of each solvent employed, in pounds;

   c) The number of batches produced/mixer and the batch sizes, in pounds;

   d) The total number of hours each mixer was in operation;

   e) The total amount of paste and base, in pounds;

   f) The rolling, 12-month summation of total paste and base; and

   g) The rolling, 12-month period total VOC emissions, in tons.

10. The permittee shall submit an annual PER to the Ohio EPA. The PER must be submitted by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve months for each air contaminant source identified in this permit. The annual PER shall identify the following:

    a) all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the PTE of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:

       (1) The permittee shall not produce more than 12,900,000 lbs of paste and 5,850,000 lbs of base per rolling, 12-month period in this facility.

       (2) The total allowable emissions of VOCs shall not exceed 49.9 tons per rolling, 12-month period.

    b) the probable cause of each deviation (excursion);

    c) any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and

    d) the magnitude and duration of each deviation (excursion).

11. Pursuant to OAC rule 3745-21-11(A)(2), this facility is exempt from the VOC RACT study requirements in OAC rule 3745-21-11 since the facility-wide PTE for VOC emissions is less than 50 TPY based upon the VOC limitation and operational restriction(s) established under sections B.7.a)(1) and B.8. If the facility's VOC emissions change such that the facility is no longer restricted to less than 50 TPY, and therefore the facility is no longer exempt, the facility must submit a VOC RACT study following the provisions in OAC rule 3745-21-11 no later than one year after disqualification.

12. Compliance with the emission limitation specified in B.2. and B.7.a) shall be demonstrated by the recordkeeping specified in B.3. and B.9.

13. The permittee is advised that this facility may be subject to the GACT requirements under Title 40 of the Code of Regulations, Part 63, Subpart BBBBBBB, the NESHAP for Area Sources: Chemical Preparations Industry. At this time, the Ohio EPA is not accepting the delegating authority to enforce the standards promulgated under the Urban Air Toxics Strategy. The requirements of this rule, that are applicable to the area source (for HAPs) identified in this permit, shall be enforceable by U.S. EPA, Region 5. The complete requirements of this Subpart (including the Part 63 General Provisions) may be accessed via the Internet from the e-CFR website http://www.ecfr.gov/ or by contacting the Ohio EPA NEDO DAPC.

14. The permittee is advised that this facility may be subject to the GACT requirements under Title 40 of the Code of Regulations, Part 63, Subpart CCCCCCC, the NESHAP for Area Sources: Paints and Allied Products Manufacturing. At this time, the Ohio EPA is not accepting the delegating authority to enforce the standards promulgated under the Urban Air Toxics Strategy. The requirements of this rule, that are applicable to the area source(s) (for HAPs) identified in this permit, shall be enforceable by U.S. EPA, Region 5. The complete requirements of this Subpart (including the Part 63 General Provisions) may be accessed via the internet from the e-CFR website http://www.ecfr.gov/ or by contacting the Ohio EPA NEDO DAPC.

C. Emissions Unit Terms and Conditions

1. P001, Soldering and brazing paste mix operations

Operations, Property and/or Equipment Description:

Solder paste process making equipment.

a) This permit document constitutes a PTI issued in accordance with ORC 3704.03(F) and a PTO issued in accordance with ORC 3704.03(G).

(1) For the purpose of a PTI document, the EU T&C identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. b)(1)d., d)(5) – d)(8) and e)(4).

(2) For the purposes of a PTO document, the EU T&C identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. b)(1)c.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each EU 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)	OC emissions shall not exceed 23.73 lbs/hr and 5.0 TPY. See b)(2)a.
b.	OAC rule 3745-31-05(A)(3)(a)(ii)	The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the PE from this air contaminant source since the controlled PTE is less than 10 TPY per the voluntary restriction required per OAC rule 3745-31-05(E).
c.	OAC rule 3745-31-05(D) [Federally Enforceable Requirements to avoid OAC rule 3745-21-11(B)]	See B.7. – B.12.
d.	OAC rule 3745-31-05(E)	See c)(1) and B.2. – B.6.
e.	OAC rule 3745-17-07(A)	VE from the stack serving this EU shall not exceed 20% opacity as a 6-minute average.
f.	OAC rule 3745-17-11 Table 1	PE shall not exceed 3.38 lbs/hr.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
g.	OAC rule 3745-114 ORC 3704.03(F)(4)(c)	See sections d)(5) – d)(8) and e)(4).

(2) Additional Terms and Conditions

a. The hourly OC emissions limitation was established to reflect the uncontrolled PTE for this EU. Therefore, it is not necessary to develop daily record keeping and/or reporting requirements to ensure compliance with this emissions limitation.

c) Operational Restrictions

(1) The emissions from this EU shall be vented to the baghouse at all times the EU is in operation.

d) Monitoring and/or Recordkeeping Requirements

(1) The pressure drop across the baghouse shall be maintained within the range of 0.1 to 6.0 inches of water, or within the range recommended by the manufacturer while the EU is in operation.

(2) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop, in inches of water, across the baghouse when the controlled EU(s) is/are in operation, including periods of startup and shutdown. The permittee shall record the pressure drop across the baghouse on a daily basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee.

Whenever the monitored value for the pressure drop deviates from the limit or range established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

a. the date and time the deviation began;

b. the magnitude of the deviation at that time;

c. the date the investigation was conducted;

d. the name(s) of the personnel who conducted the investigation; and

e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

f. a description of the corrective action;

g. the date corrective action was completed;

h. the date and time the deviation ended;

i. the total period of time (in minutes) during which there was a deviation;

j. the pressure drop readings immediately after the corrective action was implemented; and

k. the name(s) of the personnel who performed the work.

Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

This range or limit on the pressure drop across the baghouse is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the Ohio EPA NEDO. The permittee may request revisions to the permitted limit or range for the pressure drop based upon information obtained during future testing that demonstrate compliance with the allowable particulate emission rate for the controlled EU(s). In addition, approved revisions to the range or limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

(3) The permittee shall perform weekly checks, when the EU is in operation and when the weather conditions allow, for any VE from the stack serving this EU. The presence or absence of any VE shall be noted in an operations log. If VEs are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any VEs incident; and

e. any corrective actions taken to minimize or eliminate the VEs.

If VEs are present, a VEs incident has occurred. The observer does not have to document the exact start and end times for the VEs incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the VEs incident was continuous during the observation period (or, if known, continuous during the operation of the EU). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the VEs were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the EU continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal VEs.

(4) The permittee shall collect and record the following information monthly for this EU:

a. The company identification of each solvent employed;

b. The OC content of each solvent employed, in pounds;

c. The number of batches produced/mixer and the batch sizes, in pounds; and

d. The total number of hours each mixer was in operation.

(5) The PTIO application for this/these EU(s), P001 was evaluated based on the actual materials and the design parameters of the EU's(s') exhaust system, as specified by the permittee. The Toxic Air Contaminant Statute, ORC 3704.03(F), was applied to this/these EU(s) 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 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 EU(s), (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 American Conference of Governmental Industrial Hygienists = (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/was then adjusted to account for the duration of the exposure or the operating hours of the EU(s), 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 Maximum Acceptable Ground-Level Concentration (MAGLC):

   TLV/10 x 8/X x 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 TPY) or worst-case toxic contaminant(s):

   i. Toxic Contaminant: Ethylene Glycol

   TLV (mg/m3): 73.70

   Maximum Hourly Emission Rate (lbs/hr): 14.24

   Predicted 1-Hour Maximum Ground Level Concentration (ug/m3): 997.65

   MAGLC (ug/m3): 1754.76

   ii. Toxic Contaminant: Stoddard Solvent

   TLV (mg/m3): 572.60

   Maximum Hourly Emission Rate (lbs/hr): 14.59

   Predicted 1-Hour Maximum Ground Level Concentration (ug/m3): 1022.18

   MAGLC (ug/m3): 13633.27

The permittee, has demonstrated that emissions of ethylene glycol and stoddard solvent from EU(s) P001 are calculated to be less than 80% of the maximum acceptable ground level concentration (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).

(6) Prior to making any physical changes to or changes in the method of operation of the EU(s), that could impact the parameters or values that were 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 Threshold Limit Value (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, that was modeled from the initial (or last) application; and

c. physical changes to the EU(s) or its/their 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 the change(s) meet(s) the definition of a "modification", the permittee shall apply for and obtain a final PTIO prior to the change. The Director may consider any significant departure from the operations of the EU, 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 he/she may require the permittee to submit a permit application for the increased emissions.

(7) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the Toxic Air Contaminant Statute:

a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);

b. the Maximum Acceptable Ground Level Concentration (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 run(s), that established the predicted 1-hour maximum ground level concentration that demonstrated the EU(s) 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 EU(s) or the materials applied.

(8) 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) The reports required by this permit may be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal; or they may be mailed as a hard copy to the Ohio EPA NEDO.

(2) The permittee shall submit an annual PER to Ohio EPA by the due date identified in the Authorization section of this permit. The PER shall cover a reporting period of no more than 12 months for each air contaminant source identified in this permit.

(3) The permittee shall identify in the annual PER the following information concerning the operations of the EU and baghouse during the 12-month reporting period for this/these EU(s):

a. each period of time (start time and date, and end time and date) when the pressure drop across the baghouse was outside of the acceptable range;

b. any period of time (start time and date, and end time and date) when the EU(s) was/were in operation and the process emissions were not vented to the baghouse;

c. any period of time (start time and date, and end time and date) when VEs incident(s) occurred;

d. each incident of deviation described in e(3)a., e(3)b. or e(3)c. (above) where a prompt investigation was not conducted;

e. each incident of deviation described in e(3)a., e(3)b. or e(3)c. (above) where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and

f. each incident of deviation described in e(3)a., e(3)b. or e(3)c. (above) where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit.

(4) The permittee shall include 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, in the annual PER. If no changes to the emissions, EU(s), or the exhaust stack have been made, then the report shall include a statement to this effect.

f) Testing Requirements

(1) Compliance with the emission limitations in b)(1) shall be determined in accordance with the following methods:

a. <u>Emission Limitation</u>:

PE shall not exceed 3.38 lbs/hr.

<u>Applicable Compliance Method:</u>

Compliance with the hourly limit shall be determined by the following formula:

lbs/hr = (batch size)(% powder)(batches/hr)(1%, emission factor, AP 42, Table 6.4-1)(1 – 0.99, overall control efficiency of the bag house)

Compliance with the annual limit shall be determined by the following formula:

TPY = (lbs/hr)(hrs/yr)(1 ton/2000 lbs)

If required, compliance with the allowable gr/dscf limit shall be determined in accordance with Methods 1-5 of 40 CFR Part 60, Appendix A.

b. Emission Limitation:

VE from the stack shall not exceed 20% opacity as a 6-minute average.

Applicable Compliance Method:

If required, compliance with the VE limitation shall be determined through VE observations performed in accordance with U.S. EPA Method 9.

c. Emission Limitation:

OC emissions shall not exceed 23.72 lbs/hr and 5.0 TPY.

Applicable Compliance Method:

The short-term emissions limitation reflects the uncontrolled PTE and was derived using the following formula:

lbs/hr = (maximum product batch size, lbs)(max organic material used, %)(max organic content of material, %)(batches/hr)(1 – retention rate (95%))

Compliance with the annual limit shall be determined by the record keeping and reporting in sections d)(4) and e)(2) and by multiplying the short term emissions rate by the annual operating hours and the conversion factor of 1 ton/2000 lbs.

If required, compliance with the daily emission limitation shall be determined in accordance with Methods 1-4 and Method 25 or 25A of 40 CFR Part 60, Appendix A.

g) Miscellaneous Requirements

(1) None.

2. EU Group - Mixing Operations: P002 and P005

EU ID	Operations, Property and/or Equipment Description
P002	Base solder paste making process equipment controlled by DC06, a 5,000 cfm baghouse.
P005	Base chemicals mixers, scale and solder alloys related process equipment, controlled by DC07, a 9,200 cfm baghouse.

a) This permit document constitutes a PTI issued in accordance with ORC 3704.03(F) and a PTO issued in accordance with ORC 3704.03(G).

(1) For the purpose of a PTI document, the EU T&C identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. b)(1)c., d)(5) – d)(8) and e)(4).

(2) For the purposes of a PTO document, the EU T&C identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. b)(1)b.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operation(s), property, and/or equipment that constitute each EU 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)	VE from the stack serving these EUs shall not exceed 10% opacity as a 6-minute average. <u>P002 Emissions</u>: PE shall not exceed 0.03 gr/dscf; 0.15 lb/hr; and 0.67 TPY from the stack serving baghouse DC06. OC emissions shall not exceed 37.07 lbs/hr and 7.46 TPY. <u>P005 Emissions</u>: PE shall not exceed 0.025 gr/dscf; 0.1 lb/hr; and 0.44 TPY from the stack serving baghouse DC07. OC emissions shall not exceed 17.30 lbs/hr and 1.76 TPY. See b)(2)a. and b)(2)b.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
b.	OAC rule 3745-31-05(D) [Federally Enforceable Requirements to avoid OAC rule 3745-21-11(B)]	See B.7. – B.12.
c.	OAC rule 3745-31-05(E)	See B.2. – B.6.
d.	OAC rule 3745-17-07(A) OAC rule 3745-17-11	The emission limitations specified by these applicable rules are less stringent than the emission limitations established by OAC rule 3745-31-05(A)(3).
e.	OAC rule 3745-114 ORC 3704.03(F)(4)(c)	See d)(5) – d)(8) and e)(4) below.

(2) Additional Terms and Conditions

a. The emissions from these EUs shall be vented to the designated baghouses at all times one or both of the EUs are in operation.

b. The hourly OC emissions limitations were established to reflect the uncontrolled PTE for these EUs. Therefore, it is not necessary to develop record keeping and/or reporting requirements in order to ensure compliance with these emissions limitations.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The pressure drop across the baghouse shall be maintained within the range of 0.1 to 6.0 inches of water, or within the range recommended by the manufacturer while the EU is in operation.

(2) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop, in inches of water, across the baghouse when the controlled EU(s) is/are in operation, including periods of startup and shutdown. The permittee shall record the pressure drop across the baghouse on a daily basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee.

Whenever the monitored value for the pressure drop deviates from the limit or range established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

a. the date and time the deviation began;

b. the magnitude of the deviation at that time;

c. the date the investigation was conducted;

d. the name(s) of the personnel who conducted the investigation; and

e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

f. a description of the corrective action;

g. the date corrective action was completed;

h. the date and time the deviation ended;

i. the total period of time (in minutes) during which there was a deviation;

j. the pressure drop readings immediately after the corrective action was implemented; and

k. the name(s) of the personnel who performed the work.

Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

This range or limit on the pressure drop across the baghouse is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the Ohio EPA Northeast District Office. The permittee may request revisions to the permitted limit or range for the pressure drop based upon information obtained during future testing that demonstrate compliance with the allowable particulate emission rate for the controlled EU(s). In addition, approved revisions to the range or limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

(3) The permittee shall perform weekly checks, when the EU is in operation and when the weather conditions allow, for any VE from the stack serving this EU. The presence or absence of any VE shall be noted in an operations log. If VEs are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any VEs incident; and

e. any corrective actions taken to minimize or eliminate the VEs.

If VEs are present, a VEs incident has occurred. The observer does not have to document the exact start and end times for the VEs incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the VEs incident was

continuous during the observation period (or, if known, continuous during the operation of the EU). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the VEs were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the EU continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal VEs.

(4) The permittee shall collect and record the following information monthly for this EU:

a. The company identification of each solvent employed;

b. The OC content of each solvent employed, in pounds;

c. The number of batches produced/mixed and the batch sizes, in pounds; and

d. The total number of hours each mixer was in operation.

(5) The PTIO application for EUs P002 and P005 was evaluated based on the actual materials and the design parameters of the EUs' exhaust systems, as specified by the permittee. The Toxic Air Contaminant Statute, ORC 3704.03(F), was applied to these EUs 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 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 documented 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 EUs, (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 (threshold limit value (TLV) was and shall be used, if the chemical is listed):

i. TLV from the American Conference of Governmental Industrial Hygienist's (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; or

ii. Short term exposure limit (STEL) or the ceiling value from the ACGIH "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.

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/was then adjusted to account for the duration of the exposure or the operating hours of the EU(s), 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 TPY) or worst-case toxic contaminant(s) emitted from P002:

i. Toxic Contaminant: Ethylene Glycol

TLV (mg/m^3): 73.70

Maximum Hourly Emission Rate (lbs/hr): 30.39

Predicted 1-Hour Maximum Ground Level Concentration (ug/m^3): 1432.28

MAGLC (ug/m^3): 1754.76

ii. Toxic Contaminant: Stoddard Solvent

TLV (mb/m^3): 572.60

Maximum Hourly Emission Rate (lbs/hr): 31.14

Predicted 1-Hour Maximum Ground Level Concentration (ug/m^3): 1467.63

MAGLC (ug/m^3): 13633.27

e. The following summarizes the results of dispersion modeling for the significant toxic contaminants (emitted at 1 or more TPY) or worst-case toxic contaminant(s) emitted from P005:

i. Toxic Contaminant: Ethylene Glycol

TLV (mg/m^3): 73.70

Maximum Hourly Emission Rate (lbs/hr): 11.82

Predicted 1-Hour Maximum Ground Level Concentration (ug/m^3): 1356.58

MAGLC (ug/m^3): 1754.76

ii. Toxic Contaminant: Stoddard Solvent

TLV (mb/m^3): 572.60

Maximum Hourly Emission Rate (lbs/hr): 14.53

Predicted 1-Hour Maximum Ground Level Concentration (ug/m^3): 1667.61

MAGLC (ug/m^3): 13633.27

The permittee, having demonstrated that emissions of ethylene glycol and stoddard solvent from EUs P002 and P005, are estimated to be equal to or greater than 80%, but less than 100% of the MAGLC, shall not operate the EUs at a rate that would exceed the daily emissions rate, process weight rate, and/or restricted hours of operation, as allowed in this permit; and 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).

(6) Prior to making any physical changes to or changes in the method of operation of the EUs, that could impact the parameters or values that were 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, that was modeled from the initial (or last) application; and

c. physical changes to the EUs or their 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 the change(s) meet(s) the definition of a "modification", the permittee shall apply for and obtain a final PTIO prior to the change. The Director may consider any significant departure from the operations of the EUs, 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 he/she may require the permittee to submit a permit application for the increased emissions.

(7) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the Toxic Air Contaminant Statute:

a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) 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 run(s), that established the predicted 1-hour maximum ground level concentration that demonstrated the EUs 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 EU(s) or the materials applied.

(8) 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) The reports required by this permit may be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal; or they may be mailed as a hard copy to the Ohio EPA NEDO.

(2) The permittee shall submit an annual PER to Ohio EPA by the due date identified in the Authorization section of this permit. The PER shall cover a reporting period of no more than 12 months for each air contaminant source identified in this permit.

(3) The permittee shall identify in the annual PER the following information concerning the operations of the EU and baghouse during the 12-month reporting period for this/these EU(s):

a. each period of time (start time and date, and end time and date) when the pressure drop across the baghouse was outside of the acceptable range;

b. any period of time (start time and date, and end time and date) when the EU(s) was/were in operation and the process emissions were not vented to the baghouse;

c. any period of time (start time and date, and end time and date) when VEs incident(s) occurred;

d. each incident of deviation described in e(3)a., e(3)b. or e(3)c. (above) where a prompt investigation was not conducted;

e. each incident of deviation described in e(3)a., e(3)b. or e(3)c. (above) where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and

f. each incident of deviation described in e(3)a., e(3)b. or e(3)c. (above) where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit.

(4) The permittee shall include 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, in the annual PER. If no changes to the emissions, EU(s), 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 Limitation:

VE from the stack shall not exceed 10% opacity as a 6-minute average.

Applicable Compliance Method:

If required, compliance with the VE limitation shall be determined through VE observations performed in accordance with U.S. EPA Method 9.

b. Emission Limitation:

PE from P002 shall not exceed 0.03 gr/dscf, 0.15 lb/hr, and 0.67 TPY from the stack serving baghouse DC06; and

PE from P005 shall not exceed 0.025 gr/dscf, 0.1 lb/hr, and 0.44 TPY from the stack serving baghouse DC07.

Applicable Compliance Method:

Compliance with the hourly limit shall be determined by the following formula:

lb/hr = (batch size, lbs) x (% powder) x (batches/hr) x (1%, emission factor, AP 42, Table 6.4-1) x (1 – 0.99, overall control efficiency of the baghouse)

Compliance with the annual limit shall be determined by the following formula:

TPY = (lb/hr) x (hrs/yr) x (1 ton/2000 lbs)

If required, compliance shall be determined in accordance with Methods 1-5 of 40 CFR Part 60, Appendix A.

c. Emission Limitation:

OC emissions from P002 shall not exceed 37.07 lbs/hr and 7.46 TPY; and

OC emissions from P005 shall not exceed 17.30 lbs/hr and 1.76 TPY.

Applicable Compliance Method:

The short-term emissions limitations reflect the uncontrolled PTE and were derived using the following formulas:

lbs/hr = (maximum product batch size, lbs) x (max organic material used, %) x (max organic content of material, %) x (batches/hr) x (1 – 95% retention rate)

Compliance with the annual limit shall be determined by the record keeping and reporting in sections d)(4) and e)(2) and by multiplying the lbs/hr emissions rate by the annual operating hours and the conversion factor of 1 ton/2000 lbs.

If required, compliance shall be determined in accordance with Methods 1-4 and Method 25 or 25A of 40 CFR Part 60, Appendix A.

g) Miscellaneous Requirements

(1) None.