



09/17/2026

Misha Dautlick
PPG Advanced Surface Technologies, LLC
9360 Innovation Campus Way
New Albany, OH 43054

Facility ID: 0145000593
Permit Number: P0141206
County: Licking

RE: DRAFT AIR POLLUTION TITLE V PERMIT

Permit Type: Initial

Dear Permit Holder:

A draft of the OAC Chapter 3745-77 Title V permit for the referenced facility has been issued. The purpose of this draft is to solicit public comments. A public notice will appear in the Ohio Environmental Protection Agency (EPA) Weekly Review and Public Notices website, [Weekly Review and Public Notices](#). A copy of the public notice, the Statement of Basis, and the draft permit are enclosed. This permit can be accessed electronically on the Ohio EPA document search website here: [eDocument Search](#). 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
P.O. Box 1049
Columbus, Ohio 43216-1049

and

Ohio EPA, Central District Office
50 West Town St. Suite 700
P.O. Box 1049
Columbus, OH 43216-1049

Comments and/or a request for a public hearing will be accepted within 30 days of the date the notice is published 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 processing the Title V permit will be made after consideration of comments received and oral testimony if a public hearing is conducted. You will then be provided with a Preliminary Proposed Title V permit and another opportunity to comment prior to the 45-day Proposed Title V permit submittal to U.S. EPA Region 5. The permit will be issued final after U.S. EPA review is completed and no objections to the final issuance have been received. If you have any questions, please contact Ohio EPA, Central District Office at (614) 644-2270.

Sincerely,

Robert Hodanbosi
Chief, Division of Air Pollution Control

cc: U.S. EPA Region 5 - *Via E-Mail Notification*
Ohio EPA-CDO

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. Phone: 614-644-3037 Email: [*HClerk@epa.ohio.gov*](mailto:HClerk@epa.ohio.gov)

Draft Title V Permit Initial

PPG Advanced Surface Technologies, LLC
9360 Innovation Campus Way
Ste 100
New Albany, OH 43054

ID#: P0141206
Date of Action: 09/17/2026
Permit Desc: Initial TV for a film coating line, coating mixing and staging, and facility-wide usage of cleanup material.

The permit can be accessed electronically and comments may be submitted at: <https://ohioepa.commentinput.com> - Search by entering the permit P0141206 in the "Search Projects" search box.

Statement of Basis* For Air Pollution Title V Permit

*As defined in OAC rule 3745-77-01(MM): "Statement of basis" or "SOB" means a statement that sets forth the legal and factual basis for the draft [Title V] permit conditions (including references to the applicable statutory or regulatory provisions)."

Completing this form is intended to satisfy those requirements.

Facility ID:	0145000593
Facility Name:	PPG Advanced Surface Technologies, LLC
Facility Description:	Surface coating manufacturing
Facility Address:	9360 Innovation Campus Way Ste 100 New Albany, OH 43054
Permit #:	P0141206

This facility is subject to Title V because it is major for:

☐ Lead ☐ Sulfur Dioxide ☐ Carbon Monoxide ☐ Volatile Organic Compounds ☐ Nitrogen Oxides

☐ Particulate Matter $\leq$ 10 microns ☒ Single Hazardous Air Pollutant ☐ Combined Hazardous Air Pollutants ☐ GHG

And/or subject to:

☒ Maximum Available Control Technology Standard(s) ☐ GACT standard(s) that requires a Title V permit ☐ Title IV ☐ Opt-In source

A. Permit Background

1. Has each insignificant emissions unit been reviewed to confirm it meets the definition in OAC rule 3745-77-01(V)?

Yes **X**

No

Comments:

2. Discuss any **common control determinations** (this includes revisions to previous determinations), include justification, factors, and facts which led to the final decision.

Discussion: **N/A**

3. Please identify the affected unit(s) and associated PTI, if applicable, along with a brief description of any changes to the permit document resulting from a **renewal** per OAC rule 3745-77-08(E). This includes identifying conditions from previous permits that are not included in the new permit.

PTI No.: **N/A**

Affected EUs: **N/A**

Discussion of changes from the previous Title V: **N/A**

4. Please identify the affected unit(s) and associated PTI, if applicable, along with a brief description of any changes to the permit document resulting from a **minor modification** per OAC rules 3745-77-08(C)(1) or (2)

PTI No.: **N/A**

Affected EUs: **N/A**

Minor Modification Description: **N/A**

5. Please identify the affected unit(s) and associated PTI, if applicable, along with a brief description of any changes to the permit document that qualify as a **significant permit modification** per OAC rule 3745-77-08(C)(3)

PTI No.: **N/A**

Affected EUs: **N/A**

Significant Modification Description: **N/A**

6. Please identify the affected unit(s) and associated PTI, if applicable, along with a brief description of any changes to the permit document that qualify as a **reopening** per OAC rule 3745-77-08(D)



Draft Title V Permit
PPG Advanced Surface Technologies, LLC
Permit Number: P0141206
Facility ID: 0145000593
Statement of Basis

PTI No.: **N/A**

Affected EUs: **N/A**

Reopening for Cause for Description: **N/A**

7. Please identify the affected emissions unit(s) and pollutant(s) for which a **Compliance Assurance Monitoring (CAM)** Plan is required per 40 CFR 64. Provide more emissions unit specific detail in Section C.

Affected EUs: **N/A**

8. Please identify any federal **Consent Decree (CD)** that resulted in the addition of Title V T&Cs – include the CD Number, the CD Public Notice date (if known) and Ohio EPA Permit Number (if applicable, along with final permit issuance date) that incorporates the CD requirements.

CD No. N/A	Public Notice Date:	PTI No.	PTI Issuance Date:
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9. Please identify any **complex or unusual rule applicability determination** that is not readily apparent in the permit T&Cs and warrants additional explanation in the Statement of Basis. If the discussion is included in a PTI Permit Strategy Write Up cite the Permit Number and copy/paste or summarize the determination here.

PTI No. **N/A**

Discussion: **N/A**

10. Please identify any **streamlining determinations** within the permit. Include an identification of the subsumed limit(s) and an explanation of how the resulting limit is equivalent to or more stringent than those subsumed. If the discussion exists in a PTI Permit Strategy Write Up, cite the Permit Number and summarize the determination here. This would also be noted for specific emissions units identified in C.

PTI No. **N/A**

Discussion: **N/A**

11. Please identify any current **enforcement actions** to address violations at the facility resulting in a compliance plan and schedule.

Director's Final Findings and Orders; AGO Consent Decree; or U.S. EPA Consent Decree Date: **N/A**

List the Order/Injunctive Relief number from the associated enforcement document and provide a description: **N/A**

B. Facility-Wide Terms and Conditions

Term and Condition (paragraph)	Basis		Comments
	SIP (3745-)	Other	

B.2.	77-07(A)(1)	40 CFR Part 63, Subpart JJJJ	Applicability of the NESHAP for Paper and Other Web Coating
B.3.	77-07(A)(13)		Identification of an insignificant emissions unit with applicable requirements

C. Emissions Unit Terms and Conditions

Key: EU = emissions unit ID ND = negative declaration (i.e., term that indicates that a particular rule(s) is (are) not applicable to a specific emissions unit) OR = operational restriction M = monitoring requirements ENF = did noncompliance issues drive the monitoring requirements?	R = record keeping requirements Rp = reporting requirements ET = emission testing requirements (not including compliance method terms) Misc = miscellaneous requirements
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Emissions Unit Table

EU(s)	Limitation	Basis	ND	OR	M	R	Rp	ET	ENF	Misc	Comments
Section C.1: K001											
K001	Except as otherwise provided in OAC rule 3745-21-09(B)(6), VOC emissions shall not exceed 2.9 pounds of VOC per gallon of coating, excluding water and exempt solvents, or, if a control system is employed, 4.8 pounds of VOC per gallon of solids.	OAC rule 3745-21-09(F)	N	N	N	N	N	N	N	Y	OR, M, R, Rp, ET: Facility to demonstrate compliance with OAC rule 3745-21-09(B)(6) in lieu of OAC rule 3745-21-09(F)
K001	In lieu of complying with the 4.8 pounds of VOC per gallon of solids emissions limitation established under OAC rule 3745-21-09(F), the permittee shall demonstrate that the capture and control equipment provide not less than an 81% reduction, by weight, in the overall VOC emissions from the coating line and that the control equipment has an efficiency of not less than 90% by	OAC rule 3745-21-09(B)(6)	N	Y	Y	Y	Y	Y	N	Y	

Emissions Unit Table

EU(s)	Limitation	Basis	ND	OR	M	R	Rp	ET	ENF	Misc	Comments
	weight, for the VOC emissions vented to the control equipment.										
K001	The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the CO, NO _x , PM ₁₀ , PM _{2.5} , or SO ₂ emissions from this air contaminant source since the potentials-to-emit of each of those pollutants are less than 10 tons per year based on the burning of only natural gas as a fuel in this emissions unit.	OAC rule 3745-31-05(A)(3)(a)(ii)	Y	N	N	N	N	N	N	N	
K001	The permittee shall use only natural gas as a fuel in this emissions unit.	OAC rule 3745-31-05(E)	N	Y	N	Y	Y	N	N	N	M, ET: Compliance shall be based on recordkeeping specified in the permit
K001	The permittee shall limit organic HAP emissions to no more than 2 percent of the organic HAP	40 CFR Part 63, Subpart JJJJ; OAC rule	N	Y	Y	Y	Y	Y	N	Y	

Emissions Unit Table

EU(s)	Limitation	Basis	ND	OR	M	R	Rp	ET	ENF	Misc	Comments
	applied for each month (98 percent reduction).	3745-31-05(A)(3)									
Section C.2: P001											
P001	The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the emissions from this air contaminant source because the potential-to-emit for each pollutant is less than 10 tons per year taking into account the state-only enforceable limitations established under OAC rule 3745-31-05(E).	OAC rule 3745-31-05(A)(3)(a)(ii)	Y	N	N	N	N	N	N	N	
P001	VOC emissions from coating mixing and staging shall not exceed 9.7 tons per rolling, 12-month period.	OAC rule 3745-31-05(E)	N	Y	Y	Y	Y	Y	N	N	

Emissions Unit Table

EU(s)	Limitation	Basis	ND	OR	M	R	Rp	ET	ENF	Misc	Comments
Section C.3: P002											
P002	The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the emissions from this air contaminant source because the potential-to-emit is less than 10 tons per year.	OAC rule 3745-31-05(A)(3)(a)(ii)	Y	N	N	N	N	N	N	N	



**Environmental
Protection
Agency**

DRAFT

**Division of Air Pollution Control
Title V Permit
for
PPG Advanced Surface Technologies, LLC**

Facility ID:	0145000593
Permit Number:	P0141206
Permit Type:	Initial
Issued:	09/17/2026
Effective:	To be entered upon final issuance
Expiration:	To be entered upon final issuance

**Division of Air Pollution Control
Title V Permit
for
PPG Advanced Surface Technologies, LLC**

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Authorization

Facility ID: 0145000593
Facility Description:
Application Number(s): A0082498, A0082386
Permit Number: P0141206
Permit Description: Initial TV for a film coating line, coating mixing and staging, and facility-wide usage of cleanup material.
Permit Type: Initial
Issue Date:
Effective Date: To be entered upon final issuance
Expiration Date: To be entered upon final issuance
Superseded Permit Number:

This document constitutes issuance of an OAC Chapter 3745-77 Title V permit to:

PPG Advanced Surface Technologies, LLC
9360 Innovation Campus Way
Ste 100
New Albany, OH 43054

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

Ohio EPA, Central District Office
50 West Town St. Suite 700
P.O. Box 1049
Columbus, OH 43216-1049
(614) 644-2270

The above-named entity is hereby granted a Title V permit pursuant to Chapter 3745-77 of the Ohio Administrative Code. This permit and the authorization to operate the air contaminant sources (emissions units) at this facility shall expire at midnight on the expiration date shown above. You will be sent a notice approximately 18 months prior to the expiration date regarding the renewal of this permit. If you do not receive a notice, please contact the Ohio EPA, Central District Office. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC rule 3745-77-08(E) and in accordance with the terms of this permit beyond the expiration date, if a timely renewal application is submitted. A renewal application will be considered timely if it is submitted no earlier than 18 months and no later than 6 months prior to the expiration date.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

John Logue
Director

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/m ³ = 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/m ³ = 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 ₂ S = hydrogen sulfide	Ohio EPA = Ohio Environmental Protection Agency	TPY = ton(s) per year
H ₂ SO ₄ = sulfuric acid	ORC = Ohio Revised Code	TSP = total suspended particulates
HAP = hazardous air pollutant	Pb = lead	VE = visible particulate 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/m ³ = micrograms per cubic meter

A. Standard Terms and Conditions

1. Federally Enforceable Standard Terms and Conditions

- a) All Standard Terms and Conditions are federally enforceable, with the exception of those listed below which are enforceable under state law only:
- (1) Standard Term and Condition A. 24., Reporting Requirements Related to Monitoring and Record Keeping Requirements of State-Only Enforceable Permit Terms and Conditions
 - (2) Standard Term and Condition A. 25., Records Retention Requirements for State-Only Enforceable Permit Terms and Conditions
 - (3) Standard Term and Condition A. 27., Scheduled Maintenance/Malfunction Reporting for State-Only Requirements
 - (4) Standard Term and Condition A. 29., Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations
 - (5) Standard Term and Condition A. 30., Submitting Documents Required by this Permit
- [Authority for term: ORC 3704.036(A)]*

2. Monitoring and Related Record Keeping and Reporting Requirements

- a) Except as may otherwise be provided in the terms and conditions for a specific emissions unit (i.e., in section C. Emissions Unit Terms and Conditions of this Title V permit), the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
- (1) The date, place (as defined in the permit), and time of sampling or measurements.
 - (2) The date(s) analyses were performed.
 - (3) The company or entity that performed the analyses.
 - (4) The analytical techniques or methods used.
 - (5) The results of such analyses.
 - (6) The operating conditions existing at the time of sampling or measurement.
- [Authority for term: OAC rule 3745-77-07(A)(3)(b)(i)]*
- b) Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.
- [Authority for term: OAC rule 3745-77-07(A)(3)(b)(ii)]*
- c) The permittee shall submit required reports in the following manner:
- (1) All reporting required in accordance with OAC rule 3745-77-07(A)(3)(c) for deviations caused by malfunctions shall be submitted in the following manner:

Any malfunction, as defined in OAC rule 3745-15-06(B)(1), shall be promptly reported to the Ohio EPA in accordance with OAC rule 3745-15-06. In addition, to fulfill the OAC rule 3745-77-07(A)(3)(c) deviation reporting requirements for malfunctions, written reports that identify each malfunction that occurred during each calendar quarter (including each malfunction reported only verbally in accordance with OAC rule 3745-15-06) shall be submitted by January 31, April 30, July 31, and October 31 of each year in accordance with



Standard Term and Condition A.2.c)(2) below; and each report shall cover the previous calendar quarter. An exceedance of the visible emission limitations specified in OAC rule 3745-17-07(A)(1) that is caused by a malfunction is not a violation and does not need to be reported as a deviation if the owner or operator of the affected air contaminant source or air pollution control equipment complies with the requirements of OAC rule 3745-17-07(A)(3)(c).

In accordance with OAC rule 3745-15-06, a malfunction reportable under OAC rule 3745-15-06(B) is a deviation of the federally enforceable permit requirements. Even though verbal notifications and written reports are required for malfunctions pursuant to OAC rule 3745-15-06, the written reports required pursuant to this term must be submitted quarterly to satisfy the prompt reporting provision of OAC rule 3745-77-07(A)(3)(c).

In identifying each deviation caused by a malfunction, the permittee shall specify the emission limitation(s) (or control requirement(s)) for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. For a specific malfunction, if this information has been provided in a written report that was submitted in accordance with OAC rule 3745-15-06, the permittee may simply reference that written report to identify the deviation. Nevertheless, all malfunctions, including those reported only verbally in accordance with OAC rule 3745-15-06, must be reported in writing on a quarterly basis.

Any submitted scheduled maintenance requests, as referenced in OAC rule 3745-15-06(A)(1), that results in a deviation from a federally enforceable emission limitation (or control requirement) shall be reported in the same manner as described above for malfunctions.

[[Authority for term: OAC rule 3745-77-07(A)(3)(c)]

- (2) Except as may otherwise be provided in the terms and conditions for a specific emissions unit (i.e., in section C. Emissions Unit Terms and Conditions of this Title V permit or, in some cases, in section B. Facility-Wide Terms and Conditions of this Title V permit), all reporting required in accordance with OAC rule 3745-77-07(A)(3)(c) for deviations of the emission limitations, operational restrictions, and control device operating parameter limitations shall be submitted in the following manner:

Written reports of (a) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures taken, shall be submitted promptly to the Ohio EPA, Central District Office. Except as provided below, the written reports shall be submitted by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

In identifying each deviation, the permittee shall specify the emission limitation(s), operational restriction(s), and/or control device operating parameter limitation(s) for which the deviation occurred, describe each deviation, and provide the estimated magnitude and duration of each deviation.

These written deviation reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c) pertaining to the submission of monitoring reports every six months and to the prompt reporting of all deviations. Full compliance with OAC rule 3745-77-07(A)(3)(c) requires reporting of all other deviations of the federally enforceable requirements specified in the permit as required by such rule.



If an emissions unit has a deviation reporting requirement for a specific emission limitation, operational restriction, or control device operating parameter limitation that is not on a quarterly basis (e.g., within 30 days following the end of the calendar month, or within 30 or 45 days after the exceedance occurs), that deviation reporting requirement satisfies the reporting requirements specified in this Standard Term and Condition for that specific emission limitation, operational restriction, or control device parameter limitation. Following the provisions of that non-quarterly deviation reporting requirement will also satisfy (for the deviations so reported) the requirements of OAC rule 3745-77-07(A)(3)(c) pertaining to the submission of monitoring reports every six months and to the prompt reporting of all deviations, and additional quarterly deviation reports for that specific emission limitation, operational restriction, or control device parameter limitation are not required pursuant to this Standard Term and Condition.

See A.29 below if no deviations occurred during the quarter.

[[Authority for term: OAC rule 3745-77-07(A)(3)(c)]]

- (3) All reporting required in accordance with the OAC rule 3745-77-07(A)(3)(c) for other deviations of the federally enforceable permit requirements which are not reported in accordance with Standard Term and Condition A.2.c)(2) above shall be submitted in the following manner:

Unless otherwise specified by rule, written reports that identify deviations of the following federally enforceable requirements contained in this permit; Standard Terms and Conditions: A.3, A.4, A.5, A.7.e), A.8, A.13, A.15, A.20, and A.23 of this Title V permit, as well as any deviations from the requirements in section C. Emissions Unit Terms and Conditions of this Title V permit, and any monitoring, record keeping, and reporting requirements, which are not reported in accordance with Standard Term and Condition A.2.c)(2) above shall be submitted to the Ohio EPA, Central District Office by January 31 and July 31 of each year; and each report shall cover the previous six calendar months. Unless otherwise specified by rule, all other deviations from federally enforceable requirements identified in this permit shall be submitted annually as part of the annual compliance certification, including deviations of federally enforceable requirements not specifically addressed by permit or rule for the insignificant activities or emissions levels (IEU) identified in section B. Facility-Wide Terms and Conditions of this Title V permit. Annual reporting of deviations is deemed adequate to meet the deviation reporting requirements for IEUs unless otherwise specified by permit or rule.

In identifying each deviation, the permittee shall specify the federally enforceable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation.

These semi-annual and annual written reports shall satisfy the reporting requirements of OAC rule 3745-77-07(A)(3)(c) for any deviations from the federally enforceable requirements contained in this permit that are not reported in accordance with Standard Term and Condition A.2.c)(2) above.

If no such deviations occurred during a six-month period, the permittee shall submit a semi-annual report which states that no such deviations occurred during that period.

[[Authority for term: OAC rules 3745-77-07(A)(3)(c)(i) and (ii) and OAC rule 3745-77-07(A)(13)(b)]]

- (4) Each written report shall be signed by a Responsible Official certifying that, "based on information and belief formed after reasonable inquiry, the statements and information in

the report (including any written malfunction reports required by OAC rule 3745-15-06 that are referenced in the deviation reports) are true, accurate, and complete." Signature by the Responsible Official may be represented by entry of the personal identification number (PIN) by the Responsible Official as part of the electronic submission process or by the scanned attestation document signed by the Responsible Official that is attached to the electronically submitted written report.

[Authority for term: OAC rule 3745-77-07(A)(3)(c)(v)]

- (5) Consistent with A.2.c.1. above, reports of any required monitoring and/or record keeping information required to be submitted to Ohio EPA shall be submitted to Ohio EPA, Central District Office unless otherwise specified.

[Authority for term: OAC rule 3745-77-07(A)(3)(c)]

3. Reporting of Any Exceedance of a Federally Enforceable Emission Limitation or Control Requirement Resulting from Scheduled Maintenance

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. Except as provided in OAC rule 3745-15-06(A)(3), any scheduled maintenance necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s). Any scheduled maintenance, as defined in OAC rule 3745-15-06(A)(1), that results in a deviation from a federally enforceable emission limitation (or control requirement) shall be reported in the same manner as described for malfunctions in Standard Term and Condition A.2.c)(1) above.

[Authority for term: OAC rule 3745-77-07(A)(3)(c)]

4. Risk Management Plans

If applicable, the permittee shall develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. § 7401 et seq. ("Act"); and, pursuant to 40 C.F.R. 68.215(a), the permittee shall submit either of the following:

- a) A compliance plan for meeting the requirements of 40 C.F.R. Part 68 by the date specified in 40 C.F.R. 68.10(a) and OAC 3745-104-05(A); or
- b) As part of the compliance certification submitted under 40 C.F.R. 70.6(c)(5), a certification statement that the source is in compliance with all requirements of 40 C.F.R. Part 68 and OAC Chapter 3745-104, including the registration and submission of the risk management plan.

[Authority for term: OAC rule 3745-77-07(A)(4)]

5. Title IV Provisions

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

[Authority for term: OAC rule 3745-77-07(A)(5)]

6. Severability Clause

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

[Authority for term: OAC rule 3745-77-07(A)(6)]

7. General Requirements

- a) Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act and is grounds for enforcement action or for permit revocation, revocation and reissuance, or modification, or for denial of a permit renewal application.
- b) It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit except as provided pursuant to A.16 below.
- c) This permit may be modified, reopened, revoked, or revoked and reissued, for cause, in accordance with A.11 below. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.
- d) This permit does not convey any property rights of any sort, or any exclusive privilege.
- e) The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.
- f) Except as otherwise indicated below, this Title V permit, or permit modification, is effective for five years from the original effective date specified in the permit. In the event that this facility becomes eligible for non-title V permits, this permit shall cease to be enforceable when:
 - (1) The permittee submits an approved facility-wide potential to emit analysis supporting a claim that the facility no longer meets the definition of a "major source" as defined in OAC rule 3745-77-01 based on the permanent shutdown and removal of one or more emissions units identified in this permit; or
 - (2) The permittee no longer meets the definition of a "major source" as defined in OAC rule 3745-77-01 based on obtaining restrictions on the facility-wide potential(s) to emit that are federally enforceable or legally and practically enforceable; or
 - (3) A combination of (1) and (2) above.

The permittee shall continue to comply with all applicable OAC Chapter 3745-31 requirements for all regulated air contaminant sources once this permit ceases to be enforceable. The permittee shall comply with any residual requirements, such as quarterly deviation reports, semi-annual deviation reports, and annual compliance certifications covering the period during which this Title V permit was enforceable. All records relating to this permit must be maintained in accordance with law.

[Authority for term: OAC rule 3745-77-01, OAC rule 3745-77-07(A)(3)(b)(ii), OAC rule 3745-77-07(A)(7)]

8. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78.

[Authority for term: OAC rule 3745-77-07(A)(8)]

9. Marketable Permit Programs

No revision of this permit is required under any approved economic incentive, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in this permit.

[Authority for term: OAC rule 3745-77-07(A)(9)]

10. Reasonably Anticipated Operating Scenarios

The permittee is hereby authorized to make changes among operating scenarios authorized in this permit without notice to the Ohio EPA, but, contemporaneous with making a change from one operating scenario to another, the permittee must record in a log at the permitted facility the scenario under which the permittee is operating. The permit shield provided in these standard terms and conditions shall apply to all operating scenarios authorized in this permit.

[Authority for term: OAC rule 3745-77-07(A)(10)]

11. Reopening for Cause

This Title V permit will be reopened prior to its expiration date under the following conditions:

- a) Additional applicable requirements under the Act become applicable to one or more emissions units covered by this permit, and this permit has a remaining term of three or more years. Such a reopening shall be completed not later than eighteen months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to paragraph (E)(1) of OAC rule 3745-77-08.
- b) This permit is issued to an affected source under the acid rain program and additional requirements (including excess emissions requirements) become applicable. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit and shall not require a reopening of this permit.
- c) The Director of the Ohio EPA or the Administrator of the U.S. EPA determines that the federally applicable requirements in this permit are based on a material mistake, or that inaccurate statements were made in establishing the emissions standards or other terms and conditions of this permit related to such federally applicable requirements.
- d) The Administrator of the U.S. EPA or the Director of the Ohio EPA determines that this permit must be revised or revoked to assure compliance with the applicable requirements.

[Authority for term: OAC rules 3745-77-07(A)(12) and 3745-77-08(D)]

12. Federal and State Enforceability

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

[Authority for term: OAC rule 3745-77-07(B)]

13. Compliance Requirements

- a) Any document (including reports) required to be submitted and required by a federally applicable requirement in this Title V permit shall include a certification by a Responsible Official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.

- b) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:
- (1) At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
 - (2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with paragraph (E) of OAC rule 3745-77-03.
 - (3) Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
 - (4) As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.
- c) The permittee shall submit progress reports to the Ohio EPA, Central District Office concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:
- (1) Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
 - (2) An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.
- d) Compliance certifications concerning the terms and conditions contained in this permit that are federally enforceable emission limitations, standards, or work practices, shall be submitted to the Director (the Ohio EPA, Central District Office) and the Administrator of the U.S. EPA in the following manner and with the following content:
- (1) Compliance certifications shall be submitted annually on a calendar year basis. The annual certification shall be submitted on or before April 30th of each year during the permit term.
 - (2) Compliance certifications shall include the following:
 - a. Identification of each term or condition that is the basis of the certification. The identification may include a statement by the Responsible Official that every term and condition that is federally enforceable has been reviewed, and such terms and conditions with which there has been continuous compliance throughout the year are not separately identified.
 - b. The permittee's current compliance status.
 - c. Whether compliance was continuous or intermittent consistent with A.13.d)(2)a. above.
 - d. The method(s) used for determining the compliance status of the source currently and over the required reporting period consistent with A.13.d)(2)a. above.
 - e. Such other facts as the Director of the Ohio EPA may require in the permit to determine the compliance status of the source.
 - (3) Compliance certifications shall contain such additional requirements as may be specified pursuant to sections 114(a)(3) and 504(b) of the Act.

[Authority for term: OAC rules 3745-77-07(C)(1),(2),(4) and (5) and ORC section 3704.03(L)]

14. Permit Shield

- a) Compliance with the terms and conditions of this permit (including terms and conditions established for alternate operating scenarios, emissions trading, and emissions averaging, but excluding terms and conditions for which the permit shield is expressly prohibited under OAC rule 3745-77-07) shall be deemed compliance with the applicable requirements identified and addressed in this permit as of the date of permit issuance.
- b) This permit shield provision shall apply to any requirement identified in this permit pursuant to OAC rule 3745-77-07(F)(2), as a requirement that does not apply to the source or to one or more emissions units within the source.

[Authority for term: OAC rule 3745-77-07(F)]

15. Operational Flexibility

The permittee is authorized to make the changes identified in OAC rule 3745-77-07(H)(1)(a) to (H)(1)(c) within the permitted stationary source without obtaining a permit revision, if such change is not a modification under any provision of Title I of the Act [defined as "Title I modification" in OAC rule 3745-77-01], and does not result in an exceedance of the emissions allowed under this permit (whether expressed therein as a rate of emissions or in terms of total emissions), and the permittee provides the Administrator of the U.S. EPA and the Ohio EPA, Central District Office with written notification within a minimum of seven days in advance of the proposed changes, unless the change is associated with, or in response to, emergency conditions. If less than seven days' notice is provided because of a need to respond more quickly to such emergency conditions, the permittee shall provide notice to the Administrator of the U.S. EPA and the Ohio EPA, Central District Office as soon as possible after learning of the need to make the change. The notification shall contain the items required under OAC rule 3745-77-07(H)(2)(d).

[Authority for term: OAC rules 3745-77-07(H)(1) and (2)]

16. Emergencies

The permittee shall have an affirmative defense of emergency to an action brought for noncompliance with technology-based emission limitations if the conditions of OAC rule 3745-77-07(G)(3) are met. This emergency defense provision is in addition to any emergency or upset provision contained in any applicable requirement.

[Authority for term: OAC rule 3745-77-07(G)]

17. Off-Permit Changes

The owner or operator of a Title V source may make any change in its operations or emissions at the source that is not specifically addressed or prohibited in the Title V permit, without obtaining an amendment or modification of the permit, provided that the following conditions are met:

- a) The change does not result in conditions that violate any applicable requirements or that violate any existing federally enforceable permit term or condition.
- b) The permittee provides contemporaneous written notice of the change to the Director and the Administrator of the U.S. EPA, except that no such notice shall be required for changes that qualify as "insignificant activities and emissions levels" as defined in OAC rule 3745-77-01. Such written notice shall describe each such change, the date of such change, any change in emissions or pollutants emitted, and any federally applicable requirement that would apply as a result of the change.
- c) The change shall not qualify for the permit shield under OAC rule 3745-77-07(F).

- d) The permittee shall keep a record describing all changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes.
- e) The change is not subject to any applicable requirement under Title IV of the Act or is not a modification under any provision of Title I of the Act.

Paragraph (I) of rule 3745-77-07 of the Administrative Code applies only to modification or amendment of the permittee's Title V permit. The change made may require a permit-to-install under Chapter 3745-31 of the Administrative Code if the change constitutes a modification as defined in that Chapter. Nothing in paragraph (I) of rule 3745-77-07 of the Administrative Code shall affect any applicable obligation under Chapter 3745-31 of the Administrative Code.

[Authority for term: OAC rule 3745-77-07(I)]

18. Compliance Method Requirements

Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee, including but not limited to, any challenge to the Credible Evidence Rule (see 62 Federal Register 8314, Feb. 24, 1997), in the context of any future proceeding.

(This term is provided for informational purposes only.)

19. Insignificant Activities or Emissions Levels

Each IEU that is subject to one or more applicable requirements shall comply with those applicable requirements.

[Authority for term: OAC rule 3745-77-07(A)(1)]

20. Permit-to-Install Requirement

Prior to the "installation" or "modification" of any "air contaminant source," as those terms are defined in OAC rule 3745-31-01, a permit-to-install must be obtained from the Ohio EPA pursuant to OAC Chapter 3745-31.

[Authority for term: OAC rule 3745-77-07(A)(1)]

21. Air Pollution Nuisance

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

[Authority for term: OAC rule 3745-77-07(A)(1)]

22. Permanent Shutdown of an Emissions Unit

The permittee may notify Ohio EPA of any emissions unit that is permanently shut down by submitting a certification from the Responsible Official that identifies the date on which the emissions unit was permanently shut down. Authorization to operate the affected emissions unit shall cease upon the date certified by the Responsible Official that the emissions unit was permanently shut down.

After the date on which an emissions unit is permanently shut down (i.e., that 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 and therefore ceases to meet the definition of an "emissions unit" as defined in OAC rule 3745-77-01), rendering existing permit terms and conditions irrelevant, the permittee shall not be required, after the date of the certification and submission to Ohio EPA, to meet any Title V permit requirements applicable to that emissions unit, except for any

residual requirements, such as the quarterly deviation reports, semi-annual deviation reports and annual compliance certification covering the period during which the emissions unit last operated. All records relating to the shutdown emissions unit, generated while the emissions unit was in operation, must be maintained in accordance with law.

Unless otherwise exempted, no emissions unit identified in this permit that has been certified by the Responsible Official as being permanently shut down may resume operation without first applying for and obtaining a permit to install pursuant to OAC Chapter 3745-31.

[Authority for term: OAC rule 3745-77-01]

23. Title VI Provisions

If applicable, the permittee shall comply with the standards for recycling and reducing emissions of ozone depleting substances pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners in Subpart B of 40 CFR Part 82:

- a) Persons operating appliances for maintenance, service, repair, or disposal must comply with the required practices specified in 40 CFR 82.156.
- b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment specified in 40 CFR 82.158.
- c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

[Authority for term: OAC rule 3745-77-01(H)(11)]

24. Reporting Requirements Related to Monitoring and Record Keeping Requirements Under State Law Only

The permittee shall submit required reports in the following manner:

- a) Reports of any required monitoring and/or record keeping information shall be submitted to the Ohio EPA, Central District Office.
- b) Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (i) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and record keeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the Ohio EPA, Central District Office. In identifying each deviation, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

25. Records Retention Requirements Under State Law Only

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

26. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable state air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

[Authority for term: OAC rule 3745-77-07(C)]

27. Scheduled Maintenance/Malfunction Reporting for State-Only Requirements

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

28. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The Ohio EPA, Central District Office must be notified in writing of any transfer of this permit.

[Authority for term: OAC rule 3745-77-01(C)]

29. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations

If no emission limitation (or control requirement), operational restriction and/or control device parameter limitation deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

The permittee is not required to submit a quarterly report which states that no deviations occurred during that quarter for the following situations:

- a) Where an emissions unit has deviation reporting requirements for a specific emission limitation, operational restriction, or control device parameter limitation that override the deviation reporting requirements specified in Standard Term and Condition A.2.c)(2); or
- b) Where an uncontrolled emissions unit has no monitoring, record keeping, or reporting requirements and the emissions unit's applicable emission limitations are established at the potential to emit; or
- c) Where the company's Responsible Official has certified that an emissions unit has been permanently shut down.

30. Submitting Documents Required by this Permit

All applications, notifications or reports required by terms and conditions in this permit to be submitted or "reported in writing" are to be submitted to Ohio EPA through the Ohio EPA's eBusiness Center: Air Services web service ("Air Services"). Ohio EPA will accept hard copy submittals on an as-needed basis if the permittee

cannot submit the required documents through the Ohio EPA eBusiness Center. In the event of an alternative hard copy submission in lieu of the eBusiness Center, the post-marked date or the date the document is delivered in person will be recognized as the date submitted. Electronic submission of applications, notifications, or reports required to be submitted to Ohio EPA fulfills the requirement to submit the required information to the Director, the Ohio EPA, Central District Office, and/or any other individual or organization specifically identified as an additional recipient identified in this permit unless otherwise specified. Consistent with OAC rule 3745-15-03, the required application, notification or report is considered to be "submitted" on the date the submission is successful using a valid electronic signature. Signature by the Responsible Official may be represented as provided through procedures established in Air Services.

B. Facility Wide Terms and Conditions

1. All the following facility-wide terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - a) None.

2. The following emissions units contained in this permit are subject to 40 CFR Part 63, Subpart JJJJ: K001. The complete MACT requirements, including the MACT General Provisions, may be accessed from the e-CFR website <http://ecfr.gov> or by contacting the appropriate Ohio EPA, DO/LAA.

- a) The permittee shall comply with the applicable emissions limitations, monitoring and/or recordkeeping requirements, reporting and/or notification requirements, and compliance methods established pursuant to 40 CFR Part 63, Subpart JJJJ, including the following relevant sections.

Applicable Rule(s)	Requirement
40 CFR 63.3320 - 63.3330	Emission Standards and Compliance Dates
40 CFR 63.3340 - 63.3360	General Requirements for Compliance With the Emission Standards and for Monitoring and Performance Tests
40 CFR 63.3370	Requirements for Showing Compliance
40 CFR 63.400 - 63.3410	Notifications, Reports, and Records

- b) The permittee shall comply with the General Provisions of 40 CFR Part 63, Subpart A in accordance with the applicable provisions identified in 40 CFR Part 63, Subpart JJJJ Table 2 - "Applicability of 40 CFR Part 63 General Provisions to Subpart JJJJ" identifies which parts of the General Provisions in 40 CFR 63.1 through 63.16 apply.

[Authority for term: OAC rule 3745-77-07(A)(1) and 40 CFR Part 63, Subpart JJJJ]

3. The insignificant emissions units listed below are subject to requirements contained in a permit-to-install, subject to a requirement in the SIP approved versions of OAC Chapters 3745-17, 3745-18, 3745-21, and 3745-31, subject to a federal rule requirement, or otherwise subject to an *Applicable Requirement*, as defined in OAC Rule 3745-77-01:

EU ID	Operations, Property and/or Equipment Description	Applicable Requirement(s)
B001	Emergency generator - 228 HP - 150 KW - natural gas	PBR20390 OAC rule 3745-17-07(A) OAC rule 3745-17-11(B)(5)(a) 40 CFR Part 60, Subpart JJJJ 40 CFR Part 63, Subpart ZZZZ

[Authority for term: OAC rule 3745-77-07(A)(13)]

C. Emissions Unit Terms and Conditions

1. K001, Film Coating Line

Operations, Property and/or Equipment Description:

Film coating line venting to an RTO

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) See b)(1)e. and c)(1) below.

- 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 3745-21-09(F)	Except as otherwise provided in OAC rule 3745-21-09(B)(6), VOC emissions shall not exceed 2.9 pounds of VOC per gallon of coating, excluding water and exempt solvents, or, if a control system is employed, 4.8 pounds of VOC per gallon of solids. See b)(1)b. and g)(1) below.
b.	OAC rule 3745-21-09(B)(6)	In lieu of complying with the 4.8 pounds of VOC per gallon of solids emissions limitation established under OAC rule 3745-21-09(F), the permittee shall demonstrate that the capture and control equipment provide not less than an 81% reduction, by weight, in the overall VOC emissions from the coating line and that the control equipment has an efficiency of not less than 90% by weight, for the VOC emissions vented to the control equipment. See b)(2)a., c)(2), and g)(1) below.
c.	OAC rule 3745-31-05(A)(3) [BAT for VOC]	According to ORC 3704.03(T), BAT for air contaminant sources subject to MACT standards shall be equivalent to and no more stringent than those standards. BAT for VOCs is compliance with 40 CFR Part 63, Subpart JJJJ. See b)(2)a. below.
d.	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 CO,



		NO _x , PM ₁₀ , PM _{2.5} , or SO ₂ emissions from this air contaminant source since the potentials-to-emit of each of those pollutants are less than 10 tons per year based on the burning of only natural gas as a fuel in this emissions unit.
e.	OAC rule 3745-31-05(E) [State-only enforceable limitations to avoid BAT]	See c)(1) below.
f.	40 CFR Part 63, Subpart JJJJ [40 CFR 63.3280 – 63.3420] [This emissions unit is a new web coating line with an associated curing/drying oven located at a section 112 major source facility.]	See b)(2)b., c)(3), and g)(1) below.
g.	40 CFR Part 63, Subpart A [40 CFR 63.1 – 63.16]	See b)(2)c. below.

(2) Additional Terms and Conditions

- a. The VOC emissions from this emissions unit shall be vented to a thermal oxidizer (TO) that shall meet the operational, monitoring, and recordkeeping requirements of this permit, when the emissions unit is in operation.
- b. The permittee shall limit organic HAP emissions to no more than 2 percent of the organic HAP applied for each month (98 percent reduction).
- c. The permittee shall comply with the applicable requirements of the General Provisions of the National Emission Standards for Hazardous Air Pollutants in 40 CFR Part 63, Subpart A (40 CFR 63.1 – 63.16) as specified in Table 2 to 40 CFR Part 63, Subpart JJJJ.

c) Operational Restrictions

- (1) The permittee shall use only natural gas as a fuel in this emissions unit.

[Authority for term: OAC rule 3745-31-05(E)]

- (2) The permittee shall install and operate continuous temperature monitoring and recording devices. The continuous monitoring and recording devices shall be capable of accurately measuring the desired parameter and shall be operated and maintained in accordance with the manufacturer's recommendations.

[Authority for term: OAC rule 3745-21-09(B)(3)(n) and OAC rule 3745-77-07(A)(1)]

- (3) The permittee shall comply with the applicable restrictions required pursuant to 40 CFR Part 63, Subpart JJJJ, including the following sections:

40 CFR 63.3321(a) and 40 CFR Appendix Table	For a thermal oxidizer, the permittee shall meet the following operating limit:
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1 to Subpart JJJJ of Part 63	The average combustion temperature in any 3-hour period must not fall more than 50 °F below the combustion temperature limit established according to § 63.3360(e)(3)(i). For an emission capture system, the permittee shall meet the following operating limit: Submit monitoring plan to the Administrator that identifies operating parameters to be monitored according to § 63.3350(f).
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[Authority for term: 40 CFR Part 63, Subpart JJJJ]

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain daily records of the following information:
 - a. A log of operating time for the capture (collection) system, control device, monitoring equipment, and the associated coating or printing operations.
 - b. All 3-hour periods of operation during which the average combustion temperature was more than 50 degrees Fahrenheit below the average combustion temperature measured during the most recent performance test that demonstrated the emissions unit to be in compliance.

[Authority for term: OAC rule 3745-21-09(B)(4)(I) and OAC rule 3745-77-07(C)(1)]

- (2) For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

[Authority for term: OAC rule 3745-31-05(E) and OAC rule 3745-77-07(C)(1)]

- (3) The permittee shall comply with the applicable monitoring and recordkeeping requirements specified in 40 CFR Part 63, Subpart JJJJ, including the following sections:

40 CFR 63.3350(b)	Following the date on which the initial or periodic performance test of a control device is completed to demonstrate continuing compliance with the standards, the permittee must monitor and inspect each capture system and each control device used to comply with 40 CFR 63.3320.
40 CFR 63.3350(a)(3) and 63.3350(e)(10)	The permittee shall: (i) Install, maintain, and operate temperature monitoring equipment according to the manufacturer's specifications. (ii) Install, operate, and maintain a temperature monitoring device equipped with a continuous recorder. The device must be capable of monitoring temperature with an accuracy of ± 1 percent of the temperature being monitored in degrees Fahrenheit or ± 1.8 degrees Fahrenheit, whichever is greater. The temperature sensor must be installed in the combustion chamber at a location in the combustion zone. (iii) Reserved.



	(iv) For temperature sensors, the permittee must develop a quality control program that must contain, at a minimum, a written protocol that describes the procedures for verifying that the temperature sensor is operating properly using at least one of the methods in paragraph (e)(10)(iv)(A), (B), (C), (D), (E), or (F) of this section. The permittee shall keep these written procedures on record for the life of the affected source or until the affected source is no longer subject to the provisions of this part, to be made available for inspection, upon request, by the Administrator. (v) Conduct the validation checks in paragraph (e)(10)(iv)(A), (B), or (C) of this section any time the temperature sensor exceeds the manufacturer's specified maximum operating temperature range or install a new temperature sensor. (vi) At least quarterly, inspect temperature sensor components for proper connection and integrity or continuously operate an electronic monitoring system designed to notify personnel if the signal from the temperature sensor is interrupted.
40 CFR 63.3350(a)(4), 63.3350(b), and 63.3350(f)	The permittee must develop a site-specific monitoring plan for the capture system containing the information specified in paragraphs (f)(1) and (2) of this section. The permittee must install and operate the monitoring equipment and conduct all capture system monitoring in accordance with the plan. The permittee must make the monitoring plan available for inspection by the permitting authority upon request. Any deviation from the operating parameter value or range of values which are monitored according to the plan will be considered a deviation from the operating limit. The permittee must review and update the capture system monitoring plan at least annually.
40 CFR 63.3350(a)(3) and 63.3350(e)	The permittee must install, operate, and maintain each continuous parameter monitoring system (CPMS) specified in paragraphs (e)(10) and (f) of this section according to the requirements in paragraphs (e)(1) through (9) of this section.
40 CFR 63.3410(a)	The permittee must maintain the following records on a monthly basis in accordance with the requirements of 40 CFR 63.10(b)(1): (1) Records specified in 40 CFR 63.10(b)(2) of all measurements needed to demonstrate compliance with this standard as indicated in Table 2 to Subpart JJJJ of part 63, including: (i) Reserved;



	(ii) Control device and capture system operating parameter data in accordance with the requirements of 40 CFR 63.3350(e) and (f); (iii) Organic HAP content data for the purpose of demonstrating compliance in accordance with the requirements of 40 CFR 63.3360(c); (iv) Volatile matter and coating solids content data for the purpose of demonstrating compliance in accordance with the requirements of 40 CFR 63.3360(d); and (v) Overall control efficiency determination using capture efficiency and control device destruction or removal efficiency test results in accordance with the requirements of 40 CFR 63.3360(e) and (f). (2) Records specified in 40 CFR 63.10(c) for each CMS operated by the owner or operator in accordance with the requirements of 40 CFR 63.3350(b), as indicated in Table 2 to subpart JJJJ of part 63.
40 CFR 63.3410(c)	For each deviation from an operating limit occurring at an affected source, the permittee must record the following information. (1) The total operating time the web coating line(s) controlled by the corresponding add-on control device and/or emission capture system during the reporting period. (2) Date, time, duration, and cause of the deviations. (3) If the facility determines by its monthly compliance demonstration, in accordance with 40 CFR 63.3370, as applicable, that the source failed to meet an applicable emission limit of this subpart, the permittee must record the following for the corresponding affected equipment: (i) Record an estimate of the quantity of HAP (or VOC if used a surrogate in accordance with 40 CFR 63.3360(d)) emitted in excess of the emission limit for the month, and a description of the method used to estimate the emissions. (ii) Record actions taken to minimize emissions in accordance with 40 CFR 63.3340(a), and any corrective actions taken to return the affected unit to its normal or usual manner of operation.
40 CFR 63.3410(e)	Any records required to be maintained by this part that are submitted electronically via EPA's CEDRI may be maintained in electronic format. This ability to maintain electronic copies does not affect the requirement for facilities to make records,



	data, and reports available upon request to a delegated air agency or the EPA as part of an on-site compliance evaluation.
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[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 63, Subpart JJJJ]

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:

- All three-hour blocks of time (when the EU controlled by the TO was operating) during which the average combustion temperature within the TO was more than 50°F below the average temperature maintained during the most recent performance test that demonstrated the EU was in compliance;
- any records of downtime (date and length of time) for the capture (collection) system, the TO, and/or the monitoring equipment when the EU was in operation; and
- A log of the operating time for the capture system, TO, monitoring equipment, and EU.

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions in Section A of this permit.

[Authority for term: OAC rule 3745-15-03(B)(1)(a), OAC rule 3745-15-03(C), and OAC rule 3745-77-07(A)(3)(c)]

- (2) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

[Authority for term: OAC rule 3745-31-05(E)]

- (3) The permittee shall comply with the applicable notification and reporting requirements specified in 40 CFR Part 63, Subpart JJJJ, including the following sections:

40 CFR 63.3330(b)(3)	The permittee must electronically submit initial notifications, notifications of compliance status, performance evaluation reports, and performance test reports as required in 40 CFR 63.3400 immediately upon startup. Semiannual compliance reports must be submitted electronically for the first full semiannual compliance period after the template has been available in CEDRI for 1 year.
40 CFR 63.3400(a)	The permittee must submit the reports specified in 40 CFR 63.3400(b) through (k) to the Administrator.
40 CFR 63.3400(b)	Initial notifications. The permittee must submit an initial notification as required by 40 CFR 63.9(b), using the procedure in 40 CFR 63.3400(h). The permittee shall submit a notification of the actual date of startup of the source, delivered or postmarked within 15 calendar days after that date.
40 CFR 63.3400(c)	The permittee must submit a semiannual compliance report according to paragraphs (c)(1) and (2) of this section. (1) Compliance report dates. (i) The first compliance report must cover the period beginning on the compliance date that is specified for



	your affected source in 40 CFR 63.3330 (i.e., immediately upon startup) and ending on June 30 or December 31, whichever date is the first date following the end of the calendar half immediately following startup. (ii) The first compliance report is due no later than July 31 or January 31, whichever date follows the end of the calendar half immediately following the compliance date that is specified for your affected source in 40 CFR 63.3330. Prior to the electronic template being available in CEDRI for one year, the report must be postmarked or delivered by the aforementioned dates. After the electronic template has been available in CEDRI for 1 year, the next full report must be submitted electronically as described 40 CFR 63.3400(h). (iii) Each subsequent compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31. (iv) Each subsequent compliance report must be submitted electronically no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period. (2) Compliance report contents. The compliance report must contain the information in 40 CFR 63.3400(c)(2)(i) through (vi).
40 CFR 63.3400(d)	The permittee must submit a Notification of Performance Tests as specified in 40 CFR 63.7 and 63.9(e). This notification and the site-specific test plan required under 40 CFR 63.7(c)(2) must identify the operating parameters to be monitored to ensure that the capture efficiency of the capture system and the control efficiency of the control device determined during the performance test are maintained. Unless EPA objects to the parameter or requests changes, you may consider the parameter approved.
40 CFR 63.3400(e)	Notification of Compliance Status. The permittee must submit a Notification of Compliance Status as specified in 40 CFR 63.9(h). The Notification of Compliance Status must be submitted electronically using the procedure in paragraph (h) of this section.
40 CFR 63.3400(f)	The permittee must submit performance test reports as specified in 40 CFR 63.10(d)(2) if you have not obtained a waiver from the performance test requirement. Within 60 days after the date of completing each performance test required by this subpart, the permittee must submit the results of the performance test following the procedures specified in



	paragraphs (f)(1) through (3) of this section. The performance test reports must be submitted electronically using the procedure in paragraph (h) of this section.
40 CFR 63.3400(g)	Performance evaluation reports. The permittee must submit the results of performance evaluations within 60 days of completing each CMS performance evaluation (as defined in 40 CFR 63.2) following the procedures specified in paragraphs (g)(1) through (3) of this section. The performance evaluation reports must be submitted electronically using the procedure in paragraph (h) of this section.
40 CFR 63.3400(h)	Electronic reporting. If the permittee is required to submit reports following the procedure specified in this paragraph, the permittee must submit reports to EPA via CEDRI, which can be accessed through EPA's CDX (https://cdx.epa.gov/). Initial notifications and notifications of compliance status must be submitted as portable document formats (PDF) to CEDRI using the attachment module of the ERT. The permittee must use the semiannual compliance report template on the CEDRI website (https://www.epa.gov/electronic-reporting-air-emissions/compliance-and-emissions-data-reporting-interface-cedri) for this subpart 1 year after it becomes available. The date report templates become available will be listed on the CEDRI website. The report must be submitted by the deadline specified in this subpart, regardless of the method in which the report is submitted. If you claim some of the information required to be submitted via CEDRI is CBI, submit a complete report, including information claimed to be CBI to EPA. The report must be generated using the appropriate form on the CEDRI website. Submit the file on a compact disc, flash drive, or other commonly used electronic storage medium and clearly mark the medium as CBI. Mail the electronic medium to U.S. EPA/OAQPS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same file with the CBI omitted must be submitted to EPA via EPA's CDX as described earlier in this paragraph.
40 CFR 63.3400(i)	Extension for CDX/CEDRI outage. If the permittee is required to electronically submit a report through CEDRI in EPA's CDX, the permittee may assert a claim of EPA system outage for failure to timely comply with the reporting requirement. To assert a claim of EPA system outage, the permittee must meet the requirements outlined in paragraphs (i)(1) through (7) of this section.
40 CFR 63.3400(j)	Extension for force majeure events. If the permittee is required to electronically submit a report through CEDRI in EPA's CDX, then the permittee may assert a claim of force majeure for failure to timely comply with the reporting requirement. To assert a claim of force majeure, the permittee



	must meet the requirements outlined in paragraphs (j)(1) through (5) of this section.
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All reports required to be submitted using the procedure in 40 CFR 63.3400(h) shall also be submitted separately to Ohio EPA.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 63, Subpart JJJJ]

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. Emissions Limitation

In lieu of complying with the 4.8 pounds of VOC per gallon of solids emissions limitation established under OAC rule 3745-21-09(F), the permittee shall demonstrate that the capture and control equipment provide not less than an 81% reduction, by weight, in the overall VOC emissions from the coating line and that the control equipment has an efficiency of not less than 90% by weight, for the VOC emissions vented to the control equipment.

Applicable Compliance Method

The permittee shall demonstrate compliance with the VOC reduction/control requirements in accordance with the emissions testing required in f)(2) below and the recordkeeping specified in d)(1) above.

[Authority for term: OAC rule 3745-21-09(B)(6) and OAC rule 3745-77-07(C)(1)]

- (2) The permittee shall conduct, or have conducted, emissions testing for this EU per the following requirements:

- a. Emission testing to determine the control efficiency of the thermal oxidizer shall be conducted at least once every 60 months.
- b. The permittee shall demonstrate compliance with the 100% capture efficiency requirement for the permanent total enclosures using the following methods:
- i. Method 204 of 40 CFR Part 51, Appendix M
 - ii. Method 2 of 40 CFR Part 60, Appendix A.
 - iii. During the compliance demonstration for the permanent total enclosure, monitoring devices shall be installed to measure the average facial velocity of the air flow through each natural draft opening.
 - iv. Method 2 from 40 CFR Part 60, Appendix A shall be conducted to determine the volumetric flow rate of the exhaust stream(s) exiting the permanent total enclosure, corrected to standard conditions. If the building is being used as the permanent total enclosure, it may be necessary to measure the volumetric flow, corrected to standard conditions, of each gas stream entering the "enclosure" through a forced makeup air duct, using Method 2. The facial velocity (FV) shall be calculated using the following equation:



$$FV = (Q_o - Q_i) / A_n$$

where:

Q_o is the sum of the volumetric flow from all gas streams exiting the enclosure through an exhaust duct or hood;

Q_i is the sum of the volumetric flow from all gas streams into the enclosure through a forced makeup air duct, and is equal to zero if there is no forced makeup air into the enclosure; and

A_n is the total area of all natural draft openings in the enclosure.

- v. If the average facial velocity is measured at greater than 500 feet per minute (9,000 m/hr), the direction of air flow shall be assumed to be inward at all times during the compliance demonstration. If the average facial velocity is measured at less than 500 feet per minute, the continuous inward flow of air shall be verified at least once every 10 minutes for a minimum of 1 hour during the compliance demonstration, either by checking the flow or pressure meter(s) or through the use of streamers, smoke tubes, or tracer gases. All closed access doors and windows that are not considered natural draft openings shall also be checked once during the compliance demonstration for leakage around their perimeters using smoke tubes or tracer gases.
- vi. The permittee shall also measure and record the following information for the permanent total enclosure and each natural draft opening:
 - (a) The diameter of each natural draft opening;
 - (b) The distance measured from each natural draft opening to each VOC emitting point in the process;
 - (c) The distance measured from each exhaust duct or hood in the enclosure to each natural draft opening;
 - (d) The total surface area of each natural draft opening and the surface area of the enclosure's four walls, floor, and ceiling; and
 - (e) The ratio of the total surface area (sum) of all natural draft openings to the total surface area of the permanent total enclosure.
- c. The permittee shall determine the control efficiency of the thermal oxidizer in accordance with OAC rule 3745-21-10(C) and 40 CFR 63.3360(e) using the following methods:
 - i. Method 1 or 1A of appendix A-1 to 40 CFR Part 60 must be used for sample and velocity traverses to determine sampling locations.
 - ii. Method 2, 2A, 2C, 2D, or 2F of appendix A-1 to 40 CFR Part 60, or Method 2G of appendix A-2 to 40 CFR Part 60 must be used to determine gas volumetric flow rate.
 - iii. Method 3, 3A, or 3B of appendix A-2 to 40 CFR Part 60 must be used for gas analysis to determine dry molecular weight. The permittee may also use as an alternative to Method 3B the manual method for measuring the oxygen, carbon dioxide, and carbon monoxide content of exhaust gas in ANSI/ASME PTC 19.10-1981 Part 10.



- iv. Method 4 of appendix A-3 to 40 CFR Part 60 must be used to determine stack gas moisture.
- v. Methods for determining the gas volumetric flow rate, dry molecular weight, and stack gas moisture must be performed, as applicable, during each test run.
- vi. Method 25 or 25A of appendix A-7 to 40 CFR Part 60 must be used to determine total gaseous non-methane organic matter concentration. Use the same test method for both the inlet and outlet measurements which must be conducted simultaneously. The permittee must submit notice of the intended test method to the Ohio EPA for approval along with notification of the performance test required under 40 CFR 63.7(b). The permittee must use Method 25A if any of the following conditions apply to the control device.
 - (a) An exhaust gas volatile organic matter concentration of 50 ppmv or less is required to comply with the emission standards in 40 CFR 63.3320; or
 - (b) The volatile organic matter concentration at the inlet to the control system and the required level of control are such that they result in exhaust gas volatile organic matter concentrations of 50 ppmv or less; or
 - (c) Because of the high efficiency of the control device the anticipated volatile organic matter concentration at the control device exhaust is 50 ppmv or less, regardless of inlet concentration.
- vii. Except as provided in 40 CFR 63.7(e)(3), each performance test must consist of three separate runs with each run conducted for at least 1 hour. Each run shall have a minimum sample volume of 0.003 dry standard cubic meter, except that smaller sample volumes, when necessitated by process variables, may be found acceptable. For the purpose of determining volatile organic compound concentrations and mass flow rates, the average of the results of all the runs will apply.
- viii. Volatile organic matter mass flow rates must be determined for each run using Equation 1:

$$M_f = Q_{sd} C_c [12] [0.0416] [10^{-6}]$$

Equation 1

Where:

M_f = Total organic volatile matter mass flow rate, kilograms (kg)/hour (h).

Q_{sd} = Volumetric flow rate of gases entering or exiting the thermal oxidizer, as determined according to f)(2)c.ii., dry standard cubic meters (dscm)/h.

C_c = Concentration of organic compounds as carbon, ppmv.

12.0 = Molecular weight of carbon.

0.0416 = Conversion factor for molar volume, kg-moles per cubic meter (mol/m^3) (@293 Kelvin (K) and 760 millimeters of mercury (mmHg)).

- ix. For each run, the thermal oxidizer control efficiency must be determined using Equation 2:



$$E = \frac{M_{fi} - M_{fo}}{M_{fi}} \times 100$$

Equation 2

Where:

E = Organic volatile matter control efficiency of the thermal oxidizer, percent.

M_{fi} = Organic volatile matter mass flow rate at the inlet to the thermal oxidizer, kg/h.

M_{fo} = Organic volatile matter mass flow rate at the outlet of the thermal oxidizer, kg/h.

- x. The thermal oxidizer control efficiency is determined as the average of the efficiencies determined in the test runs and calculated in Equation 2.
- d. During the emissions testing, the EU shall be operated under operational conditions approved in advance by the appropriate Ohio DO/LAA. Operational conditions that may need to be approved include, but are not limited to, the production rate, the type of material processed, material make-up (solvent content, etc.) or control equipment operational limitations (burner temperature, precipitator voltage, etc.). In general, testing shall be done under *worst case* conditions expected during the life of the permit. As part of the information provided in the Intent to Test (ITT) notification form described below, the permittee shall provide a description of the EU operational conditions they will meet during the emissions testing and describe why they believe *worst case* operating conditions will be met. Prior to conducting the test(s), the permittee shall confirm with the appropriate Ohio EPA DO/LAA that the proposed operating conditions constitute *worst case*. Failure to test under the approved conditions may result in Ohio EPA not accepting the test results as a demonstration of compliance.
- e. Not later than 60 days prior to the proposed test date(s), the permittee shall submit an ITT notification to the appropriate Ohio EPA DO/LAA. The ITT notification shall describe in detail the proposed test methods and procedures, the EU operating parameters, the time(s) and date(s) of the test(s) and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA DO/LAA's refusal to accept the results of the emission test(s).
- f. Personnel from the appropriate Ohio EPA DO/LAA shall be permitted to witness the test(s), examine the testing equipment and acquire data and information necessary to ensure that the operation of the EU and the testing procedures provide a valid characterization of the emissions from the EU and/or the performance of the control equipment.
- g. A comprehensive written report on the results of the emissions test(s) shall be signed by the person(s) responsible for the tests and submitted to the appropriate Ohio EPA DO/LAA within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA DO/LAA.

[Authority for term: OAC rule 3745-21-10, OAC rule 3745-77-07(C)(1), and 40 CFR Part 63, Subpart J]]]



- (3) The permittee shall comply with the applicable testing and compliance requirements specified in 40 CFR 63.3320(a); 63.3330(b); 63.3340(c); 63.3360(a)(2), (e), and (f); and 63.3370(a)(5)(i).

[Authority for term: 40 CFR Part 63, Subpart JJJJ]

g) Miscellaneous Requirements

- (1) If the permittee elects to use a different compliance option under 40 CFR Part 63, Subpart JJJJ or OAC rule 3745-21-09, the permittee shall notify Ohio EPA in writing and any necessary and appropriate changes to this permit shall precede authorization to use any such other compliance options available under either of these rules.

[Authority for term: OAC rule 3745-77-07(C)(1)]

2. P001, Coating Mixing and Storage

Operations, Property and/or Equipment Description:

Coating mixing and staging venting to an RTO

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) See b)(1)b., b)(1)c., b)(2)a through b)(2)d., c(1), d)(7) through d)(10), and e)(2) below.

- 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)(a)(ii)	The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the emissions from this air contaminant source because the potential-to-emit for each pollutant is less than 10 tons per year taking into account the state-only enforceable limitations established under OAC rule 3745-31-05(E).
b.	OAC rule 3745-31-05(E) [State-only enforceable limitations to avoid BAT]	VOC emissions from coating mixing and staging shall not exceed 9.7 tons per rolling, 12-month period. See b)(2)a. through b)(2)d., and c)(1) below.
c.	ORC 3704.03(F)(3)(c) and (F)(4) OAC rule 3745-114-01 [Toxic air contaminant statute]	See d)(7) through d)(10) below.

- (2) Additional Terms and Conditions

- a. All of the VOC emissions from this emissions unit shall be vented to a thermal oxidizer that shall meet the operational, monitoring, and recordkeeping requirements of this permit, when the emissions unit is in operation.
- b. The permittee shall operate emissions capture systems (permanent total enclosures) at a minimum capture efficiency of 100% and a control device (thermal oxidizer) at a minimum overall control efficiency of 90% for VOC emissions. Each permanent total enclosure shall be constructed to totally enclose the emissions unit such that all VOC emissions are captured, contained, and directed to the thermal oxidizer.
- c. The permanent total enclosure shall be maintained under negative pressure whenever the EU is in operation and shall be designed and maintained to have an



average facial velocity (FV) of air through each natural draft opening (NDO) of at least 200 feet per minute (fpm) (3,600 meters per hour (m/h)). Compliance with the average FV shall be demonstrated during the compliance test by either using an air flow monitor or a differential pressure gauge at each NDO and maintaining the required FV or the corresponding negative pressure. The permanent total enclosure shall meet all the following criteria if the capture efficiency of the enclosure and control device is to be assumed to be 100%:

- i. Any NDO shall be at least four equivalent opening diameters (EDs), or four times the diameter of the opening, from each VOC emitting point. An ED is the diameter of a circle that has the same area as the opening. For a circular or oval type opening, the ED is calculated using the following equation:

$$ED = (4 \text{ area} / \pi)^{0.5}$$

For a square or rectangular type opening, the ED is calculated using either the circular/oval equation above or the following equation:

$$ED = (2)(\text{Length})(\text{Width}) / (\text{Length} + \text{Width})$$

- (a) The total area of all NDOs (A_N) shall not exceed 5% of the total surface area of the enclosure (A_T), that is, the four walls, floor, and ceiling. The NDO to enclosure area ratio (NEAR) is calculated as follows:

$$NEAR = A_N / A_T$$

- ii. The direction of air flow through all NDOs shall be into the enclosure, with an average FV of no less than 200 fpm (3,600 m/hr) or a pressure drop of 0.013 mm Hg (0.007 inches of water).
 - iii. All access doors and windows to the enclosure that do not meet the requirements of an NDO and whose surface areas are not included in the 5% surface area determination in "ii", shall be completely closed to any air movement during process operations.
 - iv. All VOC emissions shall be captured and contained for discharge through the control device.
- d. The permanent total enclosure serving this EU shall be maintained in such a manner as to meet the criteria established for a permanent total enclosure in 40 CFR, Part 51, Appendix M, Reference Method 204, and shall capture all the VOC emissions from the mixing room and staging room associated with this EU.

c) Operational Restrictions

- (1) The permanent total enclosure shall be maintained under negative pressure, at a minimum pressure differential that is not less than 0.013 mm Hg (0.007 inches of water), as a three-hour average, whenever the EU is in operation.

[Authority for term: 40 CFR Part 51, Appendix M, Method 204]

d) Monitoring and/or Recordkeeping Requirements

- (1) In order to maintain compliance with the applicable emissions limitation(s) contained in this permit, the acceptable average combustion temperature within the TO, for any three-hour



block of time when the EU controlled by the TO is operating, shall not be more than 50°F below the average temperature measured during the most recent performance test that demonstrated the EU was in compliance. Until performance testing has been conducted, the TO shall be operated and maintained per the manufacturer's recommendations, instructions, and the operating manual.

[Authority for term: OAC rule 3745-31-05(E) and OAC rule 3745-77-07(C)(1)]

- (2) The permittee shall properly install, operate and maintain a continuous temperature monitor and recorder that measures and records the combustion temperature within the TO when the EU is operating, including periods of startup and shutdown. Units shall be in degrees Fahrenheit. The accuracy for each thermocouple, monitor, and recorder shall be guaranteed by the manufacturer to be within ± 1 percent of the temperature being measured or $\pm 5^\circ\text{F}$, whichever is greater. The temperature monitor and recorder shall be installed, calibrated, operated, and maintained per the manufacturer's recommendations, instructions, and the operating manuals, with any modifications deemed necessary by the permittee. The acceptable temperature setting shall be based upon the manufacturer's specifications until such time as any required performance testing is conducted and the appropriate temperature range is established to demonstrate compliance. Following performance testing, the permittee shall collect and record the following information each day the EU is operating:
- a. All three-hour blocks of time, when the EU controlled by the TO is operating, during which the average combustion temperature within the TO was more than 50°F below the average temperature measured during the most recent performance test that demonstrated the EU was in compliance; and
 - b. A log or record of the operating time for the capture (collection) system, TO, monitoring equipment, and associated EU.

[Authority for term: OAC rule 3745-31-05(E) and OAC rule 3745-77-07(C)(1)]

- (3) Whenever the monitored average combustion temperature within the TO deviates from the range/limit established per this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

The date and time the deviation began;

- a. The magnitude of the deviation at that time;
- b. The date the investigation was conducted;
- c. The name(s) of the personnel who conducted the investigation; and
- d. 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/limit 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:

- e. A description of the corrective action;
- f. The date corrective action was completed;



- g. The date and time the deviation ended;
- h. The total period of time (in minutes) during which there was a deviation;
- i. The temperature readings immediately after the corrective action was implemented; and
- j. 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.

The temperature range/limit is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA DO/LAA. The permittee may request revisions to the permitted temperature range/limit based upon information obtained during future performance tests that demonstrate compliance with the allowable emissions rate(s) for the controlled pollutant(s). In addition, approved revisions to the temperature range/limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of a minor permit modification.

[Authority for term: OAC rule 3745-31-05(E) and OAC rule 3745-77-07(C)(1)]

- (4) The permittee shall measure, document/calculate, and maintain a permanent record of the following information for the permanent total enclosure, which may be the same record documented during the compliance test(s):

The measured diameter of each NDO;

- a. The distance measured from each NDO to each VOC emitting point;
- b. The total calculated surface area of all NDOs and the surface area of the enclosure's four walls, floor, and ceiling;
- c. The calculation or demonstration that the distance from each VOC emitting point to each NDO is at least four times the diameter of the opening; and
- d. The calculation demonstrating that the sum of the surface areas of all the NDOs to the enclosure is not more than 5% of the sum of the surface areas of the enclosure's four walls, floor, and ceiling.

[Authority for term: 40 CFR Part 51, Appendix M, Method 204]

- (5) The permittee shall install, operate, and maintain monitoring devices and a recorder that continuously monitor and record the differential pressure between the inside and outside of the permanent total enclosure when the EU is in operation. The monitoring and recording devices shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals, with any modifications deemed necessary by the permittee.

The permittee shall collect and record the following information each day:

- a. All three-hour blocks of time during which the difference in pressure between the permanent total enclosure and the surrounding areas is not maintained at or above the minimum pressure differential of 0.007 inches of water, as a three-hour average; and



- b. A log or record of downtime for the capture (collection) system when the EU was in operation.

[Authority for term: 40 CFR Part 51, Appendix M, Method 204]

- (6) The permittee shall maintain monthly records of the following information:

- a. the name and identification of each VOC-containing material introduced into emissions unit P001 for mixing and/or staging, i;
- b. the number of gallons of each VOC-containing material introduced into emissions unit P001 for mixing and/or staging during the month, L_{CM} ;
- c. the density of each VOC-containing material, D_C , in pounds per gallon;
- d. the total controlled VOC emissions from mixing and staging performed in emissions unit P001, calculated as follows:

$$\sum_{i=1}^n \left[(D_C)(L_{CM}) \left(0.015 \frac{\text{lb VOC}}{\text{lb coating}} \right) (CE) \right]$$

where,

$$0.015 \frac{\text{lb VOC}}{\text{lb coating}} = \text{the emissions factor for paint manufacturing from Table 6.4-1 of AP-42}$$

CE = the overall control efficiency for the thermal oxidizer, determined during the most recent emission test that demonstrated that the emissions unit(s) was/were in compliance or based on the manufacturer's design specifications prior to testing

- e. the rolling, 12-month VOC emissions from mixing and staging performed in emissions unit P001, i.e., the sum of the emissions from the current month and the emissions from the previous 11 months, in tons.

[Authority for term: OAC rule 3745-31-05(E) and OAC rule 3745-77-07(C)(1)]

- (7) The PTI application for EUs P001 and P002 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 emitted at over 1 TPY using an air dispersion model such as AERSCREEN, AERMOD, ISCST3 or other Ohio EPA-approved model. The predicted one-hour maximum ground-level concentration (MAGLC) results from the approved air dispersion model, were compared to the MAGLC, calculated as described in 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 eight-hour workday and a 40-hour workweek, for each toxic compound emitted from the EUs (as determined from the raw materials processed and/or coatings or other materials applied), has been documented from the American Conference of Governmental Industrial Hygienists "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices and in the following order of preference:
 - i. TLV shall be used, if the chemical is listed; or



- ii. Short-term exposure limit (STEL) or the ceiling value; the STEL is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent eight-hour TLV.
- b. The TLV is divided by 10 to adjust the standard from the working population to the general public.
- c. This standard is adjusted to account for the duration of the exposure or the operating hours of the EUs, that is, 24 hours per day and 7 days per week, from that of eight hours per day and five days per week.
- d. The resulting calculation shall be used to determine the MAGLC:
$$\frac{TLV}{10} \times \frac{8}{24} \times \frac{5}{7} = 4 \frac{TLV}{168} = MAGLC$$
- e. The following summarizes the results of dispersion modeling for the significant toxic contaminants (emitted at 1 TPY or more) or *worst-case* scenario:
 - i. Toxic Contaminant: toluene
TLV (mg/m³): 75.4
Maximum Hourly Emission Rate (lb/hr): 5.5
Predicted One-Hour Maximum Ground-Level Concentration (µg/m³): 134
MAGLC (µg/m³): 1,795
 - ii. Toxic Contaminant: vinyl acetate
TLV (mg/m³): 35.2
Maximum Hourly Emission Rate (lb/hr): 0.6
Predicted One-Hour Maximum Ground-Level Concentration (µg/m³): 14.6
MAGLC (µg/m³): 838
 - iii. Toxic Contaminant: xylene
TLV (mg/m³): 86.8
Maximum Hourly Emission Rate (lb/hr): 2.5
Predicted One-Hour Maximum Ground-Level Concentration (µg/m³): 61.1
MAGLC (µg/m³): 2,068

The permittee has demonstrated that emissions of toluene, vinyl acetate, and xylene, from EUs P001 and P002, are calculated to be less than 80% 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).

[Authority for term: ORC 3704.03(F)(3)(c) and F(4); OAC rule 3745-114-01; and Option A, Engineering Guide #70]

- (8) 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 one-hour maximum ground-level concentration, the permittee shall re-model any change to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in



determining the one-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 emissions 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.
- c. Physical changes to the EUs or exhaust parameters (for example, increased/decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines the *Toxic Air Contaminant Statute*, ORC 3704.03(F), will be satisfied for the above changes, Ohio EPA will not consider a change 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 each change meets the definition of a *modification*, the permittee shall apply for and obtain a final PTI 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.

[Authority for term: ORC 3704.03(F)(3)(c) and F(4); OAC rule 3745-114-01; Option A, Engineering Guide #70]

- (9) 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 toxic(s) modeled (for example, 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 per the *Toxic Air Contaminant Statute*, ORC 3704.03(F).
 - c. A copy of the computer model run(s), that established the predicted one-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.
 - 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 EUs or the materials applied.

[Authority for term: ORC 3704.03(F)(3)(c) and F(4); OAC rule 3745-114-01; Option A, Engineering Guide #70]

- (10) The permittee shall maintain a record of any change made to a parameter or value entered in the dispersion model used to demonstrate compliance with the *Toxic Air Contaminant Statute*, ORC 3704.03(F), through the predicted one-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.

[Authority for term: ORC 3704.03(F)(3)(c) and F(4); OAC rule 3745-114-01; Option A, Engineering Guide #70]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify the following:

- a. Each period of time (start time and date, and end time and date) when the average combustion temperature within the TO was outside of the range specified by the manufacturer and/or outside of the acceptable range following any required compliance demonstration;
- b. Any period of time (start time and date, and end time and date) when the EU was operating, and the captured process emissions were not vented to the TO;
- c. all three-hour blocks of time, when the EU was in operation, during which the permanent total enclosure was not maintained at the minimum pressure differential of 0.007 inches of water;
- d. Each incident of deviation described in "a" or "b" (above) where a prompt investigation was not conducted;
- e. Each incident of deviation described in "a" or "b" where prompt corrective action, that would bring the EU into compliance and/or the temperature within the TO into compliance with the acceptable range, was determined to be necessary and was not taken; and
- f. Each incident of deviation described in "a" or "b" where proper records were not maintained for the investigation and/or the corrective action(s).

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions in Section A of this permit.

[Authority for term: OAC rule 3745-15-03(B)(1)(a), OAC rule 3745-15-03(C), and OAC rule 3745-77-07(A)(3)(c), 40 CFR Part 51, Appendix M, Method 204]

(2) The permittee shall submit annual reports that include any changes to any parameter or value entered in the dispersion model used to demonstrate compliance with the *Toxic Air Contaminant Statute*, ORC 3704.03(F), through the predicted one-hour maximum ground-level concentration. The report shall include:

- a. The original model input.
- b. The updated model input.
- c. The reason for each change to any input parameter.
- d. A summary of the results of the updated modeling, including the input changes.
- e. A statement that the model results indicate that the one-hour maximum ground-level concentration is less than 80 percent of the MAGLC.

If no changes to the emissions, emissions units or the exhaust stack have been made during the reporting period, then the report shall include a statement to that effect. This report shall be postmarked or delivered no later than January 31 following the end of each calendar year.



[Authority for term: ORC 3704.03(F)(3)(c) and F(4); OAC rule 3745-114-01; Option A, Engineering Guide #70]

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. Emissions Limitation

The permittee shall operate emissions capture systems (permanent total enclosures) at a minimum capture efficiency of 100% and a control device (thermal oxidizer) at a minimum overall control efficiency of 90% for VOC emissions.

Applicable Compliance Method

The permittee shall demonstrate compliance with the capture and control requirements in accordance with the emissions testing required in f)(2) below and the recordkeeping specified in d)(1) through d)(5) above.

[Authority for term: OAC rule 3745-31-05(E) and OAC rule 3745-77-07(C)(1)]

b. Emissions Limitation

VOC emissions from coating mixing, coating staging, and cleanup material usage in this emissions unit shall not exceed 9.7 tons per rolling, 12-month period.

Applicable Compliance Method

Compliance shall be demonstrated through the testing required under f)(2) below, the recordkeeping specified in d)(6) above, and the monitoring and recordkeeping required for the thermal oxidizer and permanent total enclosures in d)(1) through d)(5) above.

[Authority for term: OAC rule 3745-31-05(E) and OAC rule 3745-77-07(C)(1)]

- (2) The permittee shall conduct, or have conducted, emissions testing for this EU per the following requirements:

- a. Emission testing to determine the control efficiency of the thermal oxidizer shall be conducted at least once every 60 months.
- b. The permittee shall demonstrate compliance with the 100% capture efficiency requirement for the permanent total enclosures using the following methods:
- i. Method 204 of 40 CFR Part 51, Appendix M
 - ii. Method 2 of 40 CFR Part 60, Appendix A.
 - iii. During the compliance demonstration for the permanent total enclosure, monitoring devices shall be installed to measure the average facial velocity of the air flow through each natural draft opening.
 - iv. Method 2 from 40 CFR Part 60, Appendix A shall be conducted to determine the volumetric flow rate of the exhaust stream(s) exiting the permanent total enclosure, corrected to standard conditions. If the building is being used as the permanent total enclosure, it may be necessary to measure the volumetric flow, corrected to standard conditions, of each gas stream entering the



“enclosure” through a forced makeup air duct, using Method 2. The facial velocity (FV) shall be calculated using the following equation:

$$FV = (Q_o - Q_i) / A_n$$

where:

Q_o is the sum of the volumetric flow from all gas streams exiting the enclosure through an exhaust duct or hood;

Q_i is the sum of the volumetric flow from all gas streams into the enclosure through a forced makeup air duct, and is equal to zero if there is no forced makeup air into the enclosure; and

A_n is the total area of all natural draft openings in the enclosure.

- v. If the average facial velocity is measured at greater than 500 feet per minute (9,000 m/hr), the direction of air flow shall be assumed to be inward at all times during the compliance demonstration. If the average facial velocity is measured at less than 500 feet per minute, the continuous inward flow of air shall be verified at least once every 10 minutes for a minimum of 1 hour during the compliance demonstration, either by checking the flow or pressure meter(s) or through the use of streamers, smoke tubes, or tracer gases. All closed access doors and windows that are not considered natural draft openings shall also be checked once during the compliance demonstration for leakage around their perimeters using smoke tubes or tracer gases.
- vi. The permittee shall also measure and record the following information for the permanent total enclosure and each natural draft opening:
 - (a) The diameter of each natural draft opening;
 - (b) The distance measured from each natural draft opening to each VOC emitting point in the process;
 - (c) The distance measured from each exhaust duct or hood in the enclosure to each natural draft opening;
 - (d) The total surface area of each natural draft opening and the surface area of the enclosure’s four walls, floor, and ceiling; and
 - (e) The ratio of the total surface area (sum) of all natural draft openings to the total surface area of the permanent total enclosure.
- c. The permittee shall determine the control efficiency of the thermal oxidizer in accordance using the following methods:
 - i. Method 1 or 1A of appendix A-1 to 40 CFR Part 60 must be used for sample and velocity traverses to determine sampling locations.
 - ii. Method 2, 2A, 2C, 2D, or 2F of appendix A-1 to 40 CFR Part 60, or Method 2G of appendix A-2 to 40 CFR Part 60 must be used to determine gas volumetric flow rate.
 - iii. Method 3, 3A, or 3B of appendix A-2 to 40 CFR Part 60 must be used for gas analysis to determine dry molecular weight. The permittee may also use as an alternative to Method 3B the manual method for measuring the oxygen, carbon dioxide, and carbon monoxide content of exhaust gas in ANSI/ASME PTC 19.10-1981 Part 10.



- iv. Method 4 of appendix A-3 to 40 CFR Part 60 must be used to determine stack gas moisture.
- v. Methods for determining the gas volumetric flow rate, dry molecular weight, and stack gas moisture must be performed, as applicable, during each test run.
- vi. Method 25 or 25A of appendix A-7 to 40 CFR Part 60 must be used to determine total gaseous non-methane organic matter concentration. Use the same test method for both the inlet and outlet measurements which must be conducted simultaneously. The permittee must use Method 25A if any of the following conditions apply to the control device.
 - (a) An exhaust gas volatile organic matter concentration of 50 ppmv or less is required to comply with the emission standards in 40 CFR 63.3320; or
 - (b) The volatile organic matter concentration at the inlet to the control system and the required level of control are such that they result in exhaust gas volatile organic matter concentrations of 50 ppmv or less; or
 - (c) Because of the high efficiency of the control device the anticipated volatile organic matter concentration at the control device exhaust is 50 ppmv or less, regardless of inlet concentration.

- vii. Volatile organic matter mass flow rates must be determined for each run using Equation 1:

$$M_f = Q_{sd} C_c [12] [0.0416] [10^{-6}]$$

Equation 1

Where:

M_f = Total organic volatile matter mass flow rate, kilograms (kg)/hour (h).

Q_{sd} = Volumetric flow rate of gases entering or exiting the thermal oxidizer, as determined according to f)(2)c.ii., dry standard cubic meters (dscm)/h.

C_c = Concentration of organic compounds as carbon, ppmv.

12.0 = Molecular weight of carbon.

0.0416 = Conversion factor for molar volume, kg-moles per cubic meter (mol/m^3) (@293 Kelvin (K) and 760 millimeters of mercury (mmHg)).

- viii. For each run, the thermal oxidizer control efficiency must be determined using Equation 2:

$$E = \frac{M_{fi} - M_{fo}}{M_{fi}} \times 100$$

Equation 2

Where:

E = Organic volatile matter control efficiency of the thermal oxidizer, percent.

M_{fi} = Organic volatile matter mass flow rate at the inlet to the thermal oxidizer, kg/h.

M_{fo} = Organic volatile matter mass flow rate at the outlet of the thermal oxidizer, kg/h.

- ix. The thermal oxidizer control efficiency is determined as the average of the efficiencies determined in the test runs and calculated in Equation 2.
- d. During the emissions testing, the EU shall be operated under operational conditions approved in advance by the appropriate Ohio DO/LAA. Operational conditions that may need to be approved include, but are not limited to, the production rate, the type of material processed, material make-up (solvent content, etc.) or control equipment operational limitations (burner temperature, precipitator voltage, etc.). In general, testing shall be done under *worst case* conditions expected during the life of the permit. As part of the information provided in the Intent to Test (ITT) notification form described below, the permittee shall provide a description of the EU operational conditions they will meet during the emissions testing and describe why they believe *worst case* operating conditions will be met. Prior to conducting the test(s), the permittee shall confirm with the appropriate Ohio EPA DO/LAA that the proposed operating conditions constitute *worst case*. Failure to test under the approved conditions may result in Ohio EPA not accepting the test results as a demonstration of compliance.
- e. Not later than 60 days prior to the proposed test date(s), the permittee shall submit an ITT notification to the appropriate Ohio EPA DO/LAA. The ITT notification shall describe in detail the proposed test methods and procedures, the EU operating parameters, the time(s) and date(s) of the test(s) and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA DO/LAA's refusal to accept the results of the emission test(s).
- f. Personnel from the appropriate Ohio EPA DO/LAA shall be permitted to witness the test(s), examine the testing equipment and acquire data and information necessary to ensure that the operation of the EU and the testing procedures provide a valid characterization of the emissions from the EU and/or the performance of the control equipment.
- g. A comprehensive written report on the results of the emissions test(s) shall be signed by the person(s) responsible for the tests and submitted to the appropriate Ohio EPA DO/LAA within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA DO/LAA.

[Authority for term: 40 CFR Part 51, Appendix M, Method 204]

g) **Miscellaneous Requirements**

- (1) None.

3. P002, Facility-Wide Usage of Cleanup Material

Operations, Property and/or Equipment Description:

Facility-Wide Usage of Cleanup Material

- a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) See b)(1)b., d)(1) through d)(4), and e)(1) below.

- 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)(a)(ii)	The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the emissions from this air contaminant source because the potential-to-emit is less than 10 tons per year.
b.	ORC 3704.03(F)(3)(c) and (F)(4) OAC rule 3745-114-01 [Toxic air contaminant statute]	See d)(1) through d)(4) below.

- (2) Additional Terms and Conditions

a. None.

- c) Operational Restrictions

(1) None.

- d) Monitoring and/or Recordkeeping Requirements

- (1) The PTI application for EUs P001 and P002 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 emitted at over 1 TPY using an air dispersion model such as AERSCREEN, AERMOD, ISCST3 or other Ohio EPA-approved model. The predicted one-hour maximum ground-level concentration results from the approved air dispersion model, were compared to the MAGLC, calculated as described in 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 eight-hour workday and a 40-hour workweek, for each toxic compound emitted from the EUs (as determined from the raw materials processed and/or



coatings or other materials applied), has been documented from the American Conference of Governmental Industrial Hygienists "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices and in the following order of preference:

- i. TLV shall be used, if the chemical is listed; or
- ii. Short-term exposure limit (STEL) or the ceiling value; the STEL is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent eight-hour TLV.
- b. The TLV is divided by 10 to adjust the standard from the working population to the general public.
- c. This standard is adjusted to account for the duration of the exposure or the operating hours of the EUs, that is, 24 hours per day and 7 days per week, from that of eight hours per day and five days per week.
- d. The resulting calculation shall be used to determine the MAGLC:
$$\frac{TLV}{10} \times \frac{8}{24} \times \frac{5}{7} = 4 \frac{TLV}{168} = MAGLC$$
- e. The following summarizes the results of dispersion modeling for the significant toxic contaminants (emitted at 1 TPY or more) or *worst-case* scenario:
 - i. Toxic Contaminant: toluene
TLV (mg/m³): 75.4
Maximum Hourly Emission Rate (lb/hr): 5.5
Predicted One-Hour Maximum Ground-Level Concentration (µg/m³): 134
MAGLC (µg/m³): 1,795
 - ii. Toxic Contaminant: vinyl acetate
TLV (mg/m³): 35.2
Maximum Hourly Emission Rate (lb/hr): 0.6
Predicted One-Hour Maximum Ground-Level Concentration (µg/m³): 14.6
MAGLC (µg/m³): 838
 - iii. Toxic Contaminant: xylene
TLV (mg/m³): 86.8
Maximum Hourly Emission Rate (lb/hr): 2.5
Predicted One-Hour Maximum Ground-Level Concentration (µg/m³): 61.1
MAGLC (µg/m³): 2,068

The permittee has demonstrated that emissions of toluene, vinyl acetate, and xylene, from EUs P001 and P002, are calculated to be less than 80% 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).

[Authority for term: ORC 3704.03(F)(3)(c) and F(4); OAC rule 3745-114-01; and Option A, Engineering Guide #70]



- (2) 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 one-hour maximum ground-level concentration, the permittee shall re-model any change to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the one-hour maximum ground-level concentration include, but are not limited to, the following:
- Changes in the composition of the materials used or the use of new materials, that would result in the emissions of a new toxic air contaminant with a lower TLV than the lowest TLV previously modeled.
 - 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.
 - Physical changes to the EUs or exhaust parameters (for example, increased/decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines the *Toxic Air Contaminant Statute*, ORC 3704.03(F), will be satisfied for the above changes, Ohio EPA will not consider a change 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 each change meets the definition of a *modification*, the permittee shall apply for and obtain a final PTI 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.

[Authority for term: ORC 3704.03(F)(3)(c) and F(4); OAC rule 3745-114-01; Option A, Engineering Guide #70]

- (3) 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 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 (for example, the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.).
 - The MAGLC for each significant toxic contaminant or worst-case contaminant, calculated per the *Toxic Air Contaminant Statute*, ORC 3704.03(F).
 - A copy of the computer model run(s), that established the predicted one-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.

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 EUs or the materials applied.

[Authority for term: ORC 3704.03(F)(3)(c) and F(4); OAC rule 3745-114-01; Option A, Engineering Guide #70]

- (4) The permittee shall maintain a record of any change made to a parameter or value entered in the dispersion model used to demonstrate compliance with the *Toxic Air Contaminant Statute*, ORC 3704.03(F), through the predicted one-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.

[Authority for term: ORC 3704.03(F)(3)(c) and F(4); OAC rule 3745-114-01; Option A, Engineering Guide #70]

e) Reporting Requirements

- (1) The permittee shall submit annual reports that include any changes to any parameter or value entered in the dispersion model used to demonstrate compliance with the *Toxic Air Contaminant Statute*, ORC 3704.03(F), through the predicted one-hour maximum ground-level concentration. The report shall include:

- a. The original model input.
- b. The updated model input.
- c. The reason for each change to any input parameter.
- d. A summary of the results of the updated modeling, including the input changes.
- e. A statement that the model results indicate that the one-hour maximum ground-level concentration is less than 80 percent of the MAGLC.

If no changes to the emissions, emissions units or the exhaust stack have been made during the reporting period, then the report shall include a statement to that effect. This report shall be postmarked or delivered no later than January 31 following the end of each calendar year.

[Authority for term: ORC 3704.03(F)(3)(c) and F(4); OAC rule 3745-114-01; Option A, Engineering Guide #70]

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. None.

g) Miscellaneous Requirements

- (1) None.