GENERAL PERMIT 3.11 TEMPLATE

MISC. METAL PARTS AND PRODUCTS COATING LINE EXEMPT FROM OAC RULE 3745-21-09(U)(1) AND UNCONTROLLED OR RESTRICTED VOC EMISSIONS <10 TPY

B. Facility-Wide Terms and Conditions

Note: The following are the terms and conditions for a General PTIO to be issued to a **non-Title V** facility

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

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

      (1) None.

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

      (1) None.

2. The Ohio EPA has determined that this facility may be subject to the requirements of a federal rule that the Ohio EPA does not have the delegated authority to implement. Specifically:

   a) On January 9, 2008, U.S. EPA promulgated the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources, 40 CFR Part 63, Subpart HHHHHH. Spray applications using coatings containing compounds of chromium (Cr), lead (Pb), manganese (Mn), nickel (Ni), or cadmium (Cd) and paint stripping operations using methylene chloride must be operated in compliance with this federal rule; and/or

   b) On July 23, 2008, U.S.EPA promulgated the NESHAP for Nine Metal Fabrication and Finishing Source Categories at Area Sources, 40 CFR Part 63, Subpart XXXXXX. Metal fabrication of finishing metals containing compounds of chromium (Cr), lead (Pb), manganese (Mn), nickel (Ni), or cadmium (Cd) must be operated in compliance with this federal rule.

   Although Ohio EPA has determined that one or both of these rules (also known as a GACT) may apply, at this time Ohio EPA does not have the authority to enforce this standard. Instead, U.S. EPA has the authority to enforce this standard. Please be advised that all requirements associated with these rules are in effect and are enforceable by U.S. EPA. For more information on the area source rules, please refer to the follow U.S. EPA website: http://www.epa.gov/ttn/atw/area/arearules.html.

C. Emissions Unit Terms and Conditions

1. K00X, Miscellaneous Metal Parts and Products Coating Line

Operations, Property and/or Equipment Description:

Misc. metal parts and products coating line exempt from OAC rule 3745-21-09(U)(1) and uncontrolled or restricted VOC emissions <10 TPY (GP 3.11)

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

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

a. b)(1)b., b)(1)c., b)(2)b., d)(11), d)(12) and e)(4)

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

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3), as effective 6/30/08	Volatile organic compound (VOC) emissions from coating and cleaning material use shall not exceed 0.83 ton per month averaged over a 12-month rolling period. The requirements of this rule include compliance with the requirements of OAC rule 3745-17-11(C). See b)(2)a. below.
b.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 6/30/08	The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the VOC emissions from this air contaminant source since the potential to emit is less than 10 tons/year, or, the calculated annual emission rate is less than 10 tons/year taking into account the voluntary restriction. The Best Available Technology (BAT)

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		requirements under 3745-31-05(A)(3) do not apply to particulate emissions since the calculated annual emission rate is less than 10 tons/year taking into account the federally enforceable work practice requirements in OAC rule 3745-17-11(C). See b)(2)b. below.
c.	OAC rule 3745-31-05(E), as effective 6/30/08	See c)(1) below. VOC emissions shall not exceed 9.96 tons per year.
d.	OAC rule 3745-17-11(C)	See b)(2)c. and c)(4)-(5) below.
e.	OAC rule 3745-21-09(U)(2)	See b)(2)d. and c)(2)-(3) below.

(2) Additional Terms and Conditions

a. This Best Available Technology (BAT) emission limit applies until U.S. EPA approves Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3)(a) (the less than 10 tons per year BAT exemption) into the Ohio State Implementation Plan (SIP).

b. These requirements apply once U.S. EPA approves OAC paragraph 3745-31-05(A)(3)(a)(ii) (the less than 10 tons per year BAT exemption) as part of the Ohio SIP.

c. This emissions unit is exempt from the particulate control requirements in OAC rule 3745-17-11(C) and c)(4)-(5) and d)(6)-(10) of this permit if the miscellaneous metal coating line meets any one of the following criteria:

i. surface coating processes that apply only dip coatings, roll coatings, flow coatings, or brush coatings; or

ii. surface coating processes (e.g., for sealers, adhesives, and deadeners) that employ airless spray and bead-type (extrusion) application methods.

d. This emissions unit is exempt from the VOC content limitations for coatings in OAC rule 3745-21-09(U)(1) because it is eligible for one or more of the exemptions listed in OAC rule 3745-21-09(U)(2).

c) Operational Restrictions

(1) To ensure compliance with the VOC emissions limitation of 0.83 tons per month as averaged over a 12-month period, the permittee shall either:

a. Comply with the recordkeeping requirements in and d)(3); or

b. Limit total coating and cleaning material employed to 220 gallons per month as averaged over a 12-month period and comply with the recordkeeping requirements in d)(2).

[Note: the number of gallons of coatings and cleaning material employed is the difference between the gallons of coatings and cleaning material received and the gallons of cleaning material shipped off site if records are maintained pursuant to d)(4).]

(2) To remain eligible for exemption from the coating VOC content limitations in OAC rule 3745-21-09(U)(1), the permittee shall not use coatings in excess of the following daily application rates in this emissions unit and shall comply with the recordkeeping requirements in d)(1):

a. If this emissions unit is operated in Ashtabula, Butler, Clermont, Cuyahoga, Geauga, Hamilton, Lake, Lorain, Medina, Portage, Summit, and Warren counties, 3 gallons per day;

b. If this emissions unit is operated in Clark, Greene, Miami, and Montgomery counties, 8 gallons per day; or

c. If this emissions unit is located in any other county, 10 gallons per day.

(3) To remain eligible for the exemption in OAC rule 3745-21-09(U)(2)(h), VOC emissions from all miscellaneous metal parts or products coating lines at the facility shall not exceed 15 pounds per day and the permittee shall comply with the recordkeeping requirements in d)(5).

(4) The permittee shall install and operate a dry filtration system for the control of particulate emissions whenever this emissions unit is in operation and shall maintain the dry particulate filter in accordance with the manufacturer's recommendations, instructions, and/or operating manual(s), with any modifications deemed necessary by the permittee.

(5) In the event the particulate filter system is not operating in accordance with the manufacturer's recommendations, instructions, or operating manual, with any modifications deemed necessary by the permittee, the control device shall be expeditiously repaired or otherwise returned to these documented operating conditions.

d) Monitoring and/or Recordkeeping Requirements

(1) To remain eligible for the daily application rate exemptions described in c)(2), the permittee shall collect and record the following information each day for the miscellaneous metal coating line and maintain the information at the facility for a period of three years:

a. the name and identification number of each coating applied;

b. the volume, in gallons, of each coating applied; and

c. the total volume, in gallons, of all of the coatings applied in the coating line.

(2) If the permittee chooses to demonstrate compliance with the monthly coating and cleaning material usage limit of 220 gallons averaged over a 12-month period, the permittee shall collect and record the following information each month for the miscellaneous metal coating line:

a. the volume, in gallons, of each coating (including all components, such as thinners and additives) employed;

b. the volume, in gallons, of each cleaning material employed;

c. the total volume, in gallons, of all coatings and cleaning materials employed; and

d. the average monthly coating and cleaning material usage, in gallons, over a 12-month period, i.e., the total usage for the present month plus the previous 11 months, in gallons, divided by 12 months

(3) If the permittee chooses to demonstrate compliance with the VOC emissions limitation of 0.83 tons per month as averaged over a 12-month period by maintaining monthly VOC emissions records, the permittee shall collect and record the following information in either d)(3)a. or b. each month for the miscellaneous metal coating line:

a. <u>Coating As Applied Option:</u>

i. the name and identification number of each coating applied and each cleaning material employed;

ii. the VOC content, in pounds per gallon, of each coating, as applied (including any additives or thinners, if applicable) and each cleaning material;

iii. the volume, in gallons, of each coating employed;

iv. the volume, in gallons, of each cleaning material employed;

v. the VOC emissions from coating (VOC_{CO}), in pounds of VOC per month, calculated as follows:

$$VOC_{CO} \text{ (pounds/month)} = \sum_{i=1}^{n} (G \times C_{CO})$$

Where:

G = volume of each coating employed, in gallons, as recorded in d)(3)a.iii. above;

C_{CO} = VOC content of each coating, as applied, in pounds per gallon, as recorded in d)(3)a.ii. above; and

n = total number of coatings employed during the month;

vi. the VOC emissions from cleaning materials employed (VOC_{CL}), in pounds of VOC per month, calculated as follows:

$$VOC_{CL} \text{ (pounds/month)} = \sum_{i=1}^{n} (G \times C_{CL})$$

Where:

G = volume of each cleaning material employed, in gallons, as recorded in d)(3)a.iv. above;

C_{CL} = VOC content of each cleaning material employed, in pounds per gallon, as recorded in d)(3)a.ii. above; and

n = total number of cleaning materials employed during the month; and

vii. the total VOC emissions from all coatings and cleaning materials employed, in pounds of VOC per month, calculated as follows:

Total VOC (pounds/month) = VOC_{CO} (as recorded in d)(3)a.v.) + VOC_{CL} (as recorded in d)(3)a.vi.).

viii. the average monthly VOC emissions over a 12-month period, i.e., the total VOC emissions for the present month plus the previous 11 months, in tons, divided by 12 months.

b. <u>Inventory Method:</u>

i. the name and identification number of each coating applied and each cleaning material employed;

ii. the VOC content, in pounds per gallon, of each coating component and each cleaning material as packaged.

iii. the volume, in gallons, of each coating component employed;

iv. the volume, in gallons, of each cleaning material employed;

v. the VOC emissions from coating (VOC_{CO}), in pounds of VOC per month, calculated as follows:

$$VOC_{CO} \text{ (pounds/month)} = \sum_{i=1}^{n} (G \times C_{CO})$$

Where:

G = volume of each coating component applied, in gallons, as recorded in d)(3)b.iii. above;

C_{CO} = VOC content of each coating component, in pounds per gallon, as recorded in d)(3)b.ii. above; and

n = total number of coating components employed during the month;

vi. the VOC emissions from cleaning materials employed (VOC_{CL}), in pounds of VOC per month, calculated as follows:

$$VOC_{CL} \text{ (pounds/month)} = \sum_{i=1}^{n} (G \times C_{CL})$$

Where:

G = volume of each cleaning material employed, in gallons, as recorded in d)(3)b.iv. above;

C_{CL} = VOC content of each cleaning material employed, in pounds per gallon, as recorded in d)(3)b.ii. above; and

n = total number of cleaning materials employed during the month; and

vii. the total VOC emissions from all coatings and cleaning materials employed, in pounds of VOC per month, calculated as follows:

Total VOC (pounds/month) = VOC_{CO} (as recorded in d)(3)b.v.) + VOC_{CL} (as recorded in d)(3)b.vi.).

viii. the average monthly VOC emissions over a 12-month period, i.e., the total VOC emissions for the present month plus the previous 11 months, in tons, divided by 12 months.

(4) If coatings and cleaning materials are collected for off-site disposal and/or recovery, the following records shall be maintained if a credit is to be applied to the monthly VOC emissions recorded in d)(3)a.vii. or d)(3)b.vii. above:

a. the amount of coating and cleaning material recovered during the month* for off-site disposal and/or recovery, in gallons (or pounds, if records of recovered coating and cleaning material is maintained by weight);

b. the VOC content of the recovered coating and cleaning material shall be based on the lowest VOC content of any cleaning material collected, in pounds per gallon (or percent by weight if records of recovered coating and cleaning material is maintained by weight); or it may be based upon a laboratory analyses provided by the facility to which the waste material is shipped;

c. the date the recovered coating and cleaning material was shipped, the amount shipped (minus the container), and the name and address of the receiving, disposal, and/or recovery facility; and

d. the total VOC, in pounds per month, in coating and cleaning materials collected for off-site disposal and/or recovery (i.e. summation of d)(4)a. times d)(4)b.).

* A daily log may be required for recovered coating and waste cleaning material, where a record of the monthly total volume or weight of the collected material cannot be accurately maintained. This amount shall be adjusted if the volume or weight shipped is less than the sum of the monthly recovered coating and cleaning material added to the container.

(5) If the permittee is committing to emit less than fifteen pounds of VOC per day (before add-on controls) from all miscellaneous metal parts or products coating lines within the facility, the permittee shall collect and record the following additional information each day for all miscellaneous metal coating lines at the facility:

a. the name and identification number of each coating, as applied;

b. the mass of VOC per volume (excluding water and exempt solvents) and the volume of each coating (excluding water and exempt solvents), as applied, used each day; and

c. the total VOC emissions at the facility (VOC_T), calculated as follows:

$$VOC_T \text{ (pounds/day)} = \sum_{i=1}^{n} (G \times C_{CO})$$

Where:

VOC_T = total uncontrolled VOC emissions from all coating lines combined, in pounds per day;

G = volume of each coating (excluding water and exempt solvents), as applied, used at the facility, in gallons, and the instrument or method used to accurately measure or calculate the volume of each coating, as applied, shall also be described in the certification to the director;

C_{CO} = the VOC content, in pounds per gallon, of each coating, as applied (including any additives or thinners, if applicable, but excluding water and exempt solvent); and

n = total number of different coatings applied in all the miscellaneous metal coating lines at the facility.

(6) The permittee shall maintain documentation of the manufacturer's recommendations, instructions, or operating manuals for the dry particulate filter, along with documentation of any modifications deemed necessary by the permittee. These documents shall be maintained at the facility and shall be made available to the appropriate Ohio EPA district office or local air agency upon request.

(7) The permittee shall conduct periodic inspections of the dry particulate filter to determine whether it is operating in accordance with the manufacturer’s recommendations, instructions, or operating manuals with any modifications deemed necessary by the permittee or operator. These inspections shall be performed at a frequency that shall be based upon the recommendation of the manufacturer and the permittee shall maintain a copy of the manufacturer’s recommended inspection frequency and it shall be made available to the Ohio EPA upon request.

(8) In addition to the recommended periodic inspections, not less than once each calendar year the permittee shall conduct a comprehensive inspection of the dry particulate filter while the emissions unit is shut down and perform any needed maintenance and repair to ensure that it is operated in accordance with the manufacturer's recommendations.

(9) The permittee shall document each inspection (periodic and annual) of the dry particulate filter system and shall maintain the following information:

a. the date of the inspection;
b. a description of each/any problem identified and the date it was corrected;
c. a description of any maintenance and repairs performed; and
d. the name of person who performed the inspection.

These records shall be maintained at the facility for not less than five years from the date the inspection and any necessary maintenance or repairs were completed and shall be made available to the appropriate Ohio EPA district office or local air agency upon request.

(10) The permittee shall maintain records that document any time periods when the dry particulate filter was not in service when the emissions unit(s) was/were in operation, as well as, a record of all operations during which the dry particulate filter was not operated according to the manufacturer's recommendations with any documented modifications made by the permittee. These records shall be maintained for a period of not less than five years and shall be made available to the Ohio EPA upon request.

(11) If the maximum annual emissions of any toxic air contaminant, as defined in OAC rule 3745-114-01, exceed one ton per year, the following requirements apply:

a. The permittee has confirmed that potential emissions of each toxic air contaminant from this emissions unit are less than the applicable maximum hourly emission rate listed in Appendix A of the Qualifying Criteria document for GP 3.11. The maximum hourly emission rate for each compound was established at less than eighty per cent of its maximum acceptable ground level concentration (MAGLC) as determined through toxic air contaminant modeling.

b. New coating or cleanup materials shall not be employed in this emissions unit without evaluating each toxic air contaminant in accordance with Appendix A of the Qualifying Criteria document for GP 3.11.

c. Other important changes that can affect the parameters/values used in determining compliance with the maximum hourly emission rate include, but are not limited to, the following:

i. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled;

ii. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application; and

iii. physical changes to the emissions unit(s) or its/their exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Toxic Air Contaminant Statute" will be satisfied for the above changes by demonstrating that potential emissions of each toxic air contaminant do not exceed its maximum hourly emission rate in Appendix A of the Qualifying Criteria document for GP 3.11, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to a non-restrictive change to a parameter or process operation, where compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), has been documented.

d. Prior to making a "modification" as defined by OAC rule 3745-31-01, the permittee must evaluate any changes in the composition of the materials used or use of new materials that would cause the emissions of any toxic air contaminant to increase. The permittee must apply for an individual permit-to-install and operate if new or increased emissions of any toxic air contaminant no longer comply with the applicable maximum hourly emission rate in Appendix A of the Qualifying Criteria document for GP 3.11.

e. The Director may consider any significant departure from the operations of the emissions unit that the permittee committed to in the Qualifying Criteria document to be a modification that results in greater emissions than the emission rate modeled, and he/she may require the permittee to submit a permit application for the increased emissions.

f. The permittee shall maintain a record of any change made to a parameter or value used to evaluate emissions of toxic air contaminants to complete the Qualifying Criteria document for GP 3.11 to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F). The record shall include the date and reason(s) for the change and if the change would increase the maximum emission rate of any toxic air contaminant or result in the emission of a new toxic air contaminant.

(12) If the maximum annual emissions of any toxic air contaminant, as defined in OAC rule 3745-114-01, do not exceed one ton per year, modeling to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F)(4)(b), is not necessary. OAC Chapter 3745-31 requires a permittee to apply for and obtain a new or modified permit-to-install and operate prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials or use of new materials that would cause the emissions of any toxic air contaminant to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new permit-to-install and operate.

e) Reporting Requirements

(1) The reports required by this permit may be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal; or they may be mailed as a hard copy to the appropriate district office or local air agency.

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

(3) The permittee shall notify the Ohio EPA district office or local air agency in writing of any daily record showing that the coating line employs more than the applicable maximum daily coating usage limit or if the permittee committed to the exemption in OAC rule 3745-21-09(U)(2)(h) and that the combined uncontrolled VOC emissions from all coating lines at the facility exceed 15 pounds of VOC per day. The notification shall include a copy of such record and shall be sent to the Ohio EPA district office or local air agency within 45 days after the exceedance occurs.

(4) If the maximum annual emissions of any toxic air contaminant, as defined in OAC rule 3745-114-01, exceed one ton per year, the permittee shall include any change made to

a parameter or value used to evaluate emissions of toxic air contaminants to complete the Qualifying Criteria document for GP 3.11 to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), in the annual PER. If no changes to the emissions, emissions unit(s), or the exhaust stack have been made, then the report shall include a statement to this effect.

f) Testing Requirements

(1) Compliance with the emissions limitations and/or control requirements specified in b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:
VOC emissions from coating and cleanup use shall not exceed 0.83 ton per month averaged over a 12-month rolling period.

Applicable Compliance Method:
Compliance with the VOC emissions limitation shall be demonstrated by compliance with the coating and cleaning material usage limit of 220 gallons per month as averaged over a 12-,month period as documented by the recordkeeping requirements in d)(2), or, the actual average VOC emissions for a 12-month period as documented by the record keeping requirements in d)(3).

b. Emissions Limitations:
The following daily coating application rates shall not be exceeded in this emissions unit:

i. If this emissions unit is operated in Ashtabula, Butler, Clermont, Cuyahoga, Geauga, Hamilton, Lake, Lorain, Medina, Portage, Summit, and Warren counties, 3 gallons per day;

ii. If this emissions unit is operated in Clark, Greene, Miami, and Montgomery counties, 8 gallons per day; or

iii. If this emissions unit is located in any other county, 10 gallons per day.

Applicable Compliance Method:
Compliance with the coating application rate limitations shall be demonstrated by the recordkeeping in d)(1).

c. Emissions Limitation:
If the permittee is claiming the exemption in OAC rule 3745-21-09(U)(2)(h), VOC emissions from all miscellaneous metal parts or products coating lines at the facility shall not exceed 15 pounds per day.

Applicable Compliance Method:
Compliance with the coating application rate limitations shall be demonstrated by the recordkeeping in d)(5).

(2) Formulation data or USEPA Method 24 shall be used to determine the VOC contents of all coatings and cleaning materials.

g) Miscellaneous Requirements

(1) None.