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Facility Name: **Arkay Plastics, Inc.**

Application Number: **14-4641**

Date: **Draft PTI (Date will be entered upon final issuance)**

### GENERAL PERMIT CONDITIONS

#### TERMINATION OF PERMIT TO INSTALL

Substantial construction for installation must take place within 18 months of the effective date of this permit. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

#### NOTICE OF INSPECTION

The Director of the Ohio Environmental Protection Agency, or his authorized representatives, may enter upon the premises of the above-named applicant during construction and operation at any reasonable time for the purpose of making inspections, conducting tests, or to examine records or reports pertaining to the construction, modification or installation of the source(s) of environmental pollutants identified within this permit.

#### CONSTRUCTION OF NEW SOURCES

The proposed source(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed sources are inadequate or cannot meet applicable standards.

If the construction of the proposed source(s) has already begun or has been completed prior to the date the Director of the Environmental Protection Agency approves the permit application and plans, the approval does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the approved plans. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of Ohio Administrative Code

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(OAC) Rule 3745-31-02. Furthermore, issuance of the Permit to Install does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Approval of the plans in any case is not to be construed as an approval of the facility as constructed and/or completed. Moreover, issuance of the Permit to Install is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet applicable standards.

#### **PERMIT TO INSTALL FEE**

In accordance with Ohio Revised Code 3745.11, the specified Permit to Install fee must be remitted within 30 days of the effective date of this permit to install.

#### **PUBLIC DISCLOSURE**

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC Rule 3745-49-03.

#### **APPLICABILITY**

This Permit to Install is applicable only to the contaminant sources identified. Separate application must be made to the Director for the installation or modification of any other contaminant sources.

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**BEST AVAILABLE TECHNOLOGY**

As specified in OAC Rule 3745-31-05, all new sources must employ Best Available Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

**PERMIT TO OPERATE APPLICATION**

A Permit to Operate application must be submitted to the appropriate field office for each air contaminant source in this Permit to Install. In accordance with OAC Rule 3745-35-02, the application shall be filed no later than thirty days after commencement of operation.

**SOURCE OPERATION AFTER COMPLETION OF CONSTRUCTION**

This facility is permitted to operate each source described by this permit to install for a period of up to one year from the date the source commenced operation. This permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws and regulations.

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The air contaminant emissions units listed below comprise the Permit to Install for **Arkay Plastics, Inc.** located in **Butler** County. The emissions units listed below shall not exceed the emission limits/control requirements contained in the table. This condition in no way limits the applicability of any other state or federal regulations. Additionally, this condition does not limit the applicability of additional special terms and conditions of this permit.

<u>Ohio EPA Source Number</u>	<u>Source Identification Description</u>	<u>BAT Determination</u>	<u>Applicable Federal &amp; OAC Rules</u>	<u>Permit Allowable Mass Emissions and/or Control/Usage Requirements</u>
R001 (mod)	Automated Paint Spray Booth #1	BAT is satisfied by use of non- photochemically reactive materials, compliance with Ohio EPA's Air Toxics Policy and coating and cleanup material usage limits.	3745-15-07  3745-21-07(G)  3745-31-05	See General Terms  See Additional Special Term and Condition B.1  See Additional Special Terms and Conditions A.1, A.2, A.3, A.4, A.5 and B.2
R002 (mod)	Hand Paint Spray Booth #2	BAT is satisfied by use of non- photochemically reactive materials, compliance with Ohio EPA's Air Toxics Policy and coating and cleanup material usage limits.	3745-15-07  3745-21-07(G)  3745-31-05	See General Terms  See Additional Special Term and Condition B.1  See Additional Special Terms and Conditions A.1, A.2, A.3, A.4, A.5 and B.2
R009	Hand Paint Spray Booth #3	BAT is satisfied by use of non- photochemically reactive materials,	3745-15-07	See General Terms

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<u>Ohio EPA Source Number</u>	<u>Source Identification Number</u>	<u>BAT Determination</u>	<u>Applicable Federal &amp; OAC Rules</u>	<u>Permit Allowable Mass Emissions and/or Control/Usage Requirements</u>
R009 cont'd		compliance with Ohio EPA's Air Toxics Policy and coating and cleanup material usage limits.	3745-21-07(G)  3745-31-05	See Additional Special Term and Condition B.1  See Additional Special Terms and Conditions A.1, A.2, A.3, A.4, A.5 and B.2
R010	Hand Paint Spray Booth #4	BAT is satisfied by use of non-photochemically reactive materials, compliance with Ohio EPA's Air Toxics Policy and coating and cleanup material usage limits.	3745-15-07  3745-21-07(G)  3745-31-05	See General Terms  See Additional Special Term and Condition B.1  See Additional Special Terms and Conditions A.1, A.2, A.3, A.4, A.5 and B.2

SUMMARY

TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

<u>Pollutant</u>	<u>Tons/Year</u>
Organic Compound	35

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#### **REPORTING REQUIREMENTS**

Unless otherwise specified, reports required by the Permit to Install need only be submitted to **Hamilton County Dept of Env. Services, 250 William Howard Taft Road, Cincinnati, Ohio 45219-2660.**

#### **WASTE DISPOSAL**

The owner/operator shall comply with any applicable state and federal requirements governing the storage, treatment, transport and disposal of any waste material generated by the operation of the sources.

#### **MAINTENANCE OF EQUIPMENT**

This source and its associated air pollution control system(s) shall be maintained regularly in accordance with good engineering practices and the recommendations of the respective manufacturers in order to minimize air contaminant emissions.

#### **MALFUNCTION/ABATEMENT**

In accordance with OAC RULE 3745-15-06, any malfunction of the source(s) or associated air pollution control system(s) shall be reported immediately to the **Hamilton County Dept of Env. Services, 250 William Howard Taft Road, Cincinnati, Ohio 45219-2660.**

Except as provided by OAC Rule 3745-15-06(A)(3), scheduled maintenance of air pollution control equipment that requires the shutdown or bypassing of air pollution control system(s) must be accompanied by the shutdown of the associated air pollution sources.

#### **AIR POLLUTION NUISANCES PROHIBITED**

The air contaminant source(s) identified in this permit may not cause a public nuisance in violation of OAC Rule 3745-15-07.

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**ADDITIONAL SPECIAL TERMS AND CONDITIONS**

**A. Applicable Emission Limitations and/or Control Requirements**

1. The organic compound (OC) emissions from emissions units R001, R002, R009 and R010 shall not exceed 35\* pounds per hour per emissions unit.

\*The hourly emissions limit is based on the maximum capacity of the emissions unit and thus, no hourly records are required.

2. The total combined OC emissions from emissions units R001, R002, R009 and R010 shall not exceed 35 tons per year as a rolling, 12-month summation.
3. The emissions of Hazardous Air Pollutants (HAPs), as identified in Section 112(b) of Title III of the Clean Air Act, from this facility shall not exceed 9.9 TPY for any single HAP as a rolling, 12-month summation and 24.9 TPY for any combination of HAPs as a rolling, 12-month summation.

To ensure federal enforceability during the first 12 calendar months of operation following the issuance of this permit to install, the permittee shall not exceed the HAPs emissions limits specified in the following table:

Month (s)	Maximum Allowable Single HAP Emissions (Tons)	Maximum Allowable Combined HAP Emissions (Tons)
1	0.8	2.1
1-2	1.7	4.2
1-3	2.5	6.2
1-4	3.3	8.3
1-5	4.2	10.4
1-6	5.0	12.5
1-7	5.8	14.6
1-8	6.7	16.7
1-9	7.5	18.8
1-10	8.3	20.8
1-11	9.2	22.9
1-12	9.9	24.9

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After the first 12 calendar months of operation following the issuance of this permit to install, compliance with the annual HAPs emissions limit shall be based upon a rolling, 12-month summation.

4. The OC content of each coating employed in emissions units R001, R002, R009 and R010 shall not exceed 6.42 pounds of OC per gallon of coating.
5. The OC content of each cleanup material employed in emissions units R001, R002, R009 and R010 shall not exceed 7.6 pounds of OC per gallon of cleanup material.

**B. Operational Restrictions**

1. The use of photochemically reactive materials as defined in OAC rule 3745-21-01(C)(5) is prohibited in emissions units R001, R002, R009 and R010.
2. The combined maximum annual coating usage in emissions units R001, R002, R009 and R010 shall not exceed 10,730 gallons per year based upon a rolling, 12-month summation of the coating usage figures.

The combined maximum annual organic cleanup material usage in emissions units R001, R002, R009 and R010 shall not exceed 150 gallons per year based upon a rolling, 12-month summation based upon the cleanup material usage figures.

To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit to install, the permittee shall not exceed the coating and organic cleanup material usage levels specified in the following table:

Month(s)	Maximum Allowable Cumulative Coating Usage (Gallons)	Maximum Allowable Cumulative Cleanup Material Usage (Gallons)
1	894	12.5
1-2	1788	25
1-3	2682	37.5
1-4	3577	50
1-5	4471	62.5
1-6	5365	75
1-7	6259	87.5

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1-8	7153	100
1-9	8047	112.5
1-10	8942	125
1-11	9836	137.5
1-12	10730	150

After the first 12 calendar months of operation following the issuance of this permit to install, compliance with the coating and organic cleanup material usage limit shall be based upon a rolling, 12-month summation.

### **C. Monitoring and Recordkeeping Requirements**

1. 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 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.
2. The permittee shall collect and record the following information for each month for emissions units R001, R002, R009 and R010 combined:
  - a. the company identification for each coating and organic cleanup material employed;
  - b. documentation on whether or not each coating and organic cleanup material is a photochemically reactive material as defined in OAC rule 3745-21-01(C)(5);
  - c. the number of gallons of each coating and organic cleanup material employed;
  - d. the organic compound content of each coating and organic cleanup material, in pounds per gallon;
  - e. the total monthly OC emissions from emissions units R001, R002, R009 and R010 combined;
  - f. the updated rolling, 12-month summation of OC emissions in tons; and,

- g. beginning after the first 12 calendar months of operation following issuance of this permit, the rolling, 12-month summation of the coating and cleanup material usage figures.

Also, during the first 12 calendar months of operation following issuance of this permit, the permittee shall record the cumulative coating and cleanup material usage for each calendar month.

- 3. The permittee shall collect and record the following information each month for the entire facility:
  - a. the name and identification number of each coating employed;
  - b. the individual Hazardous Air Pollutant (HAP) content for each HAP of each coating in pounds of individual HAP per gallon of coating, as applied;
  - c. the total combined HAP content of each coating in pounds of combined HAPs per gallon of coating, as applied [sum all the individual HAP contents from (b)];
  - d. the number of gallons of each coating employed;
  - e. the name and identification of each cleanup material employed;
  - f. the individual HAP content for each HAP of each cleanup material, in pounds of individual HAP per gallon of cleanup material, as applied;
  - g. the total combined HAP content of each cleanup material, in pounds of combined HAPs per gallon of cleanup material, as applied [sum all the individual HAP contents from (f)];
  - h. the number of gallons of each cleanup material employed;
  - i. the total individual HAP emissions for each HAP from all coatings and cleanup materials employed, in pounds or tons per month [for each HAP the sum of (b) times (d) for each coating plus the sum of (f) times (h) for each cleanup material];
  - j. the total combined HAP emissions from all coatings and cleanup materials employed, in pounds or tons

per month [the sum of (c) times (d) for each coating plus the sum of (g) times (h) for each cleanup material]; and,

k. the updated rolling, 12-month summation of emissions for each individual HAP emissions, in pounds or tons. This shall include the information for the current month and the preceding eleven calendar months. For the first twelve months following the issuance of the permit, this shall be a cumulative total for all months since the issuance of the PTI.

l. The updated rolling, 12-month summation of emissions for total combined HAP emissions, in pounds or tons. This shall include the information for the current month and the preceding eleven calendar months. For the first twelve months following the issuance of the permit, this shall be a cumulative total for all months since the issuance of the PTI.

\* A listing of the HAPs can be found in Section 112(b) of the Clean Air Act or can be obtained by contacting your Hamilton County Department of Environmental Services contact. This information does not have to be kept on a line-by-line basis.

4. The permittee shall collect and record the following information for each change where the air toxic modeling was required pursuant to the Air Toxic Policy:

a. background data that describes the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.); and,

b. a copy of the resulting computer model runs that show the results of the application of the Air Toxic Policy for the change.

**D. Reporting Requirements**

1. The permittee shall submit required reports in the following manner:

- a. reports of any required monitoring and/or recordkeeping information shall be submitted to the Hamilton County Department of Environmental Services;
  - b. except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the Hamilton County Department of Environmental Services. 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 i.e., by January 30, April 30, July 30, and October 30 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).
2. The permittee shall notify the Hamilton County Department of Environmental Services in writing of any monthly record showing the use of noncomplying coatings or cleanup materials. The notification shall include a copy of such record and shall be sent to the Hamilton County Department of Environmental Services within 30 days following the end of the calendar month.
  3. The permittee shall notify the Hamilton County Department of Environmental Services of any monthly record showing any deviation from the following:
    - a. the total individual HAP emission limitation for each HAP from all coatings and cleanup materials employed, in pounds or tons per month and pounds or tons per rolling, 12-month period; and,
    - b. the total combined HAP emissions from all coatings and cleanup materials employed, in pounds or tons per month and pounds or tons per rolling 12-month period.

4. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month coating and cleanup material usage limitation and, for the first 12 calendar months of operation following issuance of this permit, all exceedances of the maximum allowable cumulative coating and cleanup material usage levels.
5. The permittee shall notify the Hamilton County Department of Environmental Services in writing identifying each day during which any photochemically reactive material [as defined in OAC rule 3745-21-01(C)(5)] was employed in this emissions unit. This report shall identify the cause for the use of the photochemically reactive material(s) and the estimated total quantity of material(s) emitted each such day.
6. The permittee shall submit annual reports which specify the total VOC emissions from emissions unit R001, R002, R009 and R010 for the previous calendar year. These reports shall be submitted by January 30 of each year.

**E. Compliance Methods/Testing Requirements**

1. Formulation data or USEPA method 24 (for coatings) or 24A (for flexographic and rotogravure printing inks and related coatings) shall be used to determine the OC contents of the coatings and organic cleanup material.
2. Compliance with the limitations outlined in Term A.2 shall be demonstrated by the monitoring and record keeping in Term C.2.
3. Compliance with the limitations outlined in Term A.3 shall be demonstrated by the monitoring and record keeping in Term C.3.
4. Compliance with the operational restrictions outlined in Terms B.1 and B.2 shall be demonstrated by the monitoring and record keeping in Term C.2.

**F. Miscellaneous Requirements**

1. Air Toxic Policy Clarifying Language

This permit allows the use of materials (typically coatings and cleanup materials) specified by the permittee in the permit to install application for this emissions unit. To fulfill the best available technology requirements of (OAC) rule 3745-31-05 and to

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ensure compliance with OAC rule 3745-15-07 (Air Pollution Nuisances Prohibited), the emission limitation(s) specified in this permit was (were) established using the Ohio EPA's "Air Toxic Policy" and is (are) based on both the materials used and the design parameters of the emissions unit's exhaust system, as specified in the application. The Ohio EPA's "Air Toxic Policy" was applied for each pollutant using the SCREEN 3.0 model and comparing the predicted 1-hour maximum ground-level concentration to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for each pollutant:

Pollutant: Toluene  
TLV (ug/m3): 188,000  
Maximum Hourly Emission Rate per Emissions Unit (lbs/hr):  
4.41  
Predicted 1-Hour Maximum Ground-Level  
Concentration (ug/m3): 2,005  
MAGLC (ug/m3): 4,476

Pollutant: Cyclohexane  
TLV (ug/m3): 1,032,600  
Maximum Hourly Emission Rate per Emissions Unit (lbs/hr):  
8.28  
Predicted 1-Hour Maximum Ground-Level  
Concentration (ug/m3): 3,724  
MAGLC (ug/m3): 24,586

Pollutant: Butanol  
TLV (ug/m3): 151,570  
Maximum Hourly Emission Rate per Emissions Unit (lbs/hr):  
7.58  
Predicted 1-Hour Maximum Ground-Level  
Concentration (ug/m3): 3,437  
MAGLC (ug/m3): 3,609

Pollutant: Methyl ethyl ketone  
TLV (ug/m3): 589,770  
Maximum Hourly Emission Rate per Emissions Unit (lbs/hr):  
11.22  
Predicted 1-Hour Maximum Ground-Level  
Concentration (ug/m3): 5,049  
MAGLC (ug/m3): 14,042

Pollutant: Butyl acetate  
TLV (ug/m3): 712,640  
Maximum Hourly Emission Rate per Emissions Unit (lbs/hr):  
17.93  
Predicted 1-Hour Maximum Ground-Level

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Concentration (ug/m3): 8,092

MAGLC (ug/m3): 16,968

OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by the OAC rule 3745-31-01. The permittee is hereby advised that the following changes to the process may be determined to be a "modification":

- a. Changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value specified in the above table.
- b. Changes to the emissions unit or its exhaust parameters (e.g., increased emission rate [not including an increase in an "allowable" emission limitation specified in the terms and conditions of this permit], reduced exhaust gas flow rate, and decreased stack height).
- c. Changes in the composition of the materials used, or use of new materials, that would result in the emission of an air contaminant not previously permitted.
- d. Changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant that has a listed TLV.

The Ohio EPA will not consider any of the above-mentioned as a "modification" requiring a permit to install, if the following conditions are met:

- a. The change is not otherwise considered a "modification" under OAC Chapter 3745-31.
- b. The permittee can continue to comply with the allowable emission limitations specified in its permit to install.
- c. Prior to the change, the applicant conducts an evaluation pursuant to the Air Toxic Policy,

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determines that the changed emissions unit still satisfies the Air Toxic Policy, and the permittee maintains documentation that identifies the change and the results of the application of the Air Toxic Policy for the change.

For any change to the emissions unit or its method of operation that either would require an increase in the emission limitation(s) established by this permit or would otherwise be considered a "modification" as defined in OAC rule 3745-31-01, the permittee shall obtain a final permit to install prior to the change.

2. The following terms and conditions shall supersede all the air pollution control requirements for emissions units R001 and R002 contained in the permit to install [application number 14-1982] as issued on May 15, 1991 and modified on February 16, 1995:

Terms A thru F.