

Facility ID: 1677120007 Issuance type: Final State Permit To Operate

This version of facility specific terms and conditions was converted from a database format to an HTML file during an upgrade of the Ohio EPA, Division of Air Pollution Control's permitting software. Every attempt has been made to convert the terms and conditions to look and substantively conform to the permit issued or being drafted in STARS. However, the format of the terms may vary slightly from the original. In addition, although it is not expected, there is a slight possibility that a term and condition may have been inadvertently "left out" of this reproduction during the conversion process. Therefore, if this version is to be used as a starting point in drafting a new version of a permit, it is imperative that the entire set of terms and conditions be reviewed to ensure they substantively mimic the issued permit. The official version of any permit issued final by Ohio EPA is kept in the Agency's Legal section. The Legal section may be contacted at (614) 644-3037.

In addition to the terms and conditions, hyperlinks have been inserted into the document so you may more readily access the section of the document you wish to review.

Finally, the term language under "Part II" and before "A. Applicable Emissions Limitations..." has been added to aid in document conversion, and was not part of the original issued permit.

- [Go to Part II for Emissions Unit P005](#)
- [Go to Part II for Emissions Unit P007](#)
- [Go to Part II for Emissions Unit P008](#)
- [Go to Part II for Emissions Unit P009](#)
- [Go to Part II for Emissions Unit P010](#)

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Facility ID: 1677120007 Emissions Unit ID: P005 Issuance type: Final State Permit To Operate

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**Part II - Special Terms and Conditions**

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

1. For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
  - (a) None.
2. For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
  - (a) None.

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

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Plastisol dip molding with electric oven - unit #5 with a capacity of 100 lbs/hr	OAC rule 3745-31-05(A)(3) (PTI #16-01945)	The requirements of this rule also include compliance with requirements of OAC rule 3745-21-07(G)(2) and 3745-31-05(D).  5.6 lbs/hr of organic compounds (OC);  0.6 lbs/hr of Stoddard solvent*  *The Stoddard solvent is included in the allowable mass emissions for OC.  11.25 tons of OC per rolling , 12-month period for P004 through P010.
	OAC rule 3745-31-05(D)	Exempt from the requirements of this rule pursuant to term B.1. below.
	OAC rule 3745-21-07(G)(2)	

2. **Additional Terms and Conditions**
  - (a) None

**B. Operational Restrictions**

1. The permittee shall only employ materials in this emissions unit which meet the following criteria either pursuant to OAC rule 3745-21-07(G)(9)(c) or pursuant to OAC rule 3745-21-07(G)(9)(d):
 

OAC rule 3745-21-07(G)(9)(c):

  - a. the volatile content of such material consists only of water and liquid organic material; and
  - b. the liquid organic material comprises not more than twenty percent of said volatile content; and
  - c. the volatile content is not a photochemically reactive material.

OAC rule 3745-21-07(G)(9)(d):

  - d. the volatile content of such material does not exceed twenty percent by volume of said material; and

- e. the volatile content is not a photochemically reactive material.
2. The maximum annual solvent usage for P005, P007, P008, P009 and P010 shall not exceed 18,000 pounds per year, based upon a rolling, 12-month summation of the solvent usage figures.

To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the solvent usage levels specified in the following table:

Maximum Allowable  
Month(s) Cumulative Solvent Usage

1 1500 pounds  
1-2 3000 pounds  
1-3 4500 pounds  
1-4 6000 pounds  
1-5 7500 pounds  
1-6 9000 pounds  
1-7 10,500 pounds  
1-8 12,000 pounds  
1-9 13,500 pounds  
1-10 15,000 pounds  
1-11 16,500 pounds  
1-12 18,000 pounds

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual solvent usage limitation shall be based upon a rolling, 12-month summation of the solvent usage figures.

3. The additive organic compound (OC) volatiles from P005, P007, P008, P009, and P010 shall not exceed 4104 pounds per year, based upon a rolling, 12-month summation of the monthly additive OC volatiles usage.

To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the additive OC volatiles levels specified in the following table:

Maximum Allowable  
Cumulative Additive  
Month(s) OC volatiles Usage

1 342 pounds  
1-2 684 pounds  
1-3 1026 pounds  
1-4 1368 pounds  
1-5 1710 pounds  
1-6 2052 pounds  
1-7 2394 pounds  
1-8 2736 pounds  
1-9 3078 pounds  
1-10 3420 pounds  
1-11 3762 pounds  
1-12 4104 pounds

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual additive OC volatiles limitation shall be based upon a rolling, 12-month summation of the monthly amount of additive OC volatiles usage figures.

**C. Monitoring and/or Record Keeping Requirements**

1. The permittee shall maintain records which document that each material employed in this emissions unit meets the criteria specified in B.1 above.
2. The permittee shall maintain monthly records of the following information:
- the solvent usage, in pounds;
  - the additive OC volatiles usage, in pounds; and
  - beginning after the first 12 calendar months of operation following the issuance of this permit, the rolling, 12-month summation of the solvent usage figures and the additive OC volatiles usage figures.
- Also, during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative solvent usage and the cumulative additive OC volatiles usage for each calendar month.
- the Stoddard solvent weight percent in the plastisol.
  - the plastisol production rate.
3. The permit to install for this emissions unit (P005) was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Stoddard solvent (additive OC)

TLV (mg/m3): 572

Maximum Hourly Emission Rate (lbs/hr): 0.6

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 228.7

MAGLC (ug/m3): 13,628

4. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

- 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 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 pollutant with a listed TLV that was proposed in the application and modeled; and
- c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

5. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will satisfy the "Air Toxics Policy:"

- a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
- b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
- c. where computer modeling is performed, 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 deviation (excursion) reports which identify any material employed which does not meet the criteria in B.1 above. The report shall be submitted within 45 days of the occurrence.
2. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month usage limitations for solvent and additive OC volatiles and, for the first 12 calendar months of operation following the issuance of this permit, all exceedances of the maximum allowable cumulative usage levels. These reports are by the date described in Part 1 - General Terms and Conditions of this permit under section (A)(1).

**E. Testing Requirements**

1. Compliance with the emission limitations in A.1 above shall be determined in accordance with the following methods:

Emission Limitation:

5.6 lbs/hr of organic compounds (OC)

Applicable Compliance Method:

Compliance shall be determined by multiplying the maximum weight percent of solvent in the plastisol by the maximum production rate, or use OAC rule 3745-21-10(C).

Emission Limitation:

0.6 lbs/hr of Stoddard solvent (additive OC)

Applicable Compliance Method

Multiply the maximum weight percent of Stoddard solvent in the plastisol by the maximum production rate.

Emission Limitation:

11.25 tons of OC per rolling, 12-month period for P004 through P010

Applicable Compliance Method:

Compliance shall be determined by totaling the following:

- i. plastisol emissions

Monthly record keeping of the solvent and additive OC volatiles usage for P004, P005, P006, P007, P008, P009, and P010 as required in C.2 and C.3. above.

- ii. natural gas combustion

Multiply the AP-42 organic compound emission factor of 5.5 pounds of organic compound emissions per million cubic feet of natural gas fired by the maximum yearly amount of natural gas fired and divided by 2000 lbs/ton.

**F. Miscellaneous Requirements**

1. This permit to install shall supersede all the air pollution control requirements for these emissions units previously contained in permit to install number 16-1709, as issued on March 10, 1999.
2. In accordance with OAC rule 3745-31-05(D), sections II.A.1, II.B.2, II.B.3, II.C.1, II.C.2, II.C.3, II.D.1, and II.D.2 of these terms and conditions constitute the federally enforceable portions of this permit.

\*\*\*THIS IS NOT AN OFFICIAL VERSION OF THE PERMIT. SEE PAGE 1 FOR ADDITIONAL INFORMATION\*\*\*

Facility ID: 1677120007 Emissions Unit ID: P007 Issuance type: Final State Permit To Operate

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**Part II - Special Terms and Conditions**

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

1. For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
  - (a) None.
2. For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
  - (a) None.

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

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Plastisol dip molding with natural gas oven - unit #7 with a capacity of 370 lbs/hr	OAC rule 3745-31-05(A)(3) (PTI #16-01945)	The requirements of this rule also include compliance with requirements of OAC rule 3745-21-07(G)(2) and 3745-31-05(D).  20.73 lbs/hr of organic compounds (OC);  2.22 lbs/hr of Stoddard solvent*  *The Stoddard solvent is included in the allowable mass emissions for OC.  0.052 tpy of particulate emissions  0.688 tpy of nitrogen oxides (NOx)  0.578 tpy of carbon monoxide (CO)  0.004 tpy of sulfur dioxide (SO2)  11.25 tons of OC per rolling, 12-month period for P004 through P010
	OAC rule 3745-31-05(D)	Exempt from the requirements of this rule pursuant to term B.1 below.
	OAC rule 3745-21-07(G)(2)	

2. **Additional Terms and Conditions**
  - (a) None

**B. Operational Restrictions**

1. The permittee shall only employ materials in this emissions unit which meet the following criteria either pursuant to OAC rule 3745-21-07(G)(9)(c) or pursuant to OAC rule 3745-21-07(G)(9)(d):

OAC rule 3745-21-07(G)(9)(c):

- a. the volatile content of such material consists only of water and liquid organic material; and
- b. the liquid organic material comprises not more than twenty percent of said volatile content; and
- c. the volatile content is not a photochemically reactive material.

OAC rule 3745-21-07(G)(9)(d):

- d. the volatile content of such material does not exceed twenty percent by volume of said material; and
  - e. the volatile content is not a photochemically reactive material.
2. The maximum annual solvent usage for P005, P007, P008, P009 and P010 shall not exceed 18,000 pounds per year, based upon a rolling, 12-month summation of the solvent usage figures.

To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the solvent usage levels specified in the following table:

Maximum Allowable  
Month(s) Cumulative Solvent Usage

1 1500 pounds  
1-2 3000 pounds  
1-3 4500 pounds  
1-4 6000 pounds  
1-5 7500 pounds  
1-6 9000 pounds  
1-7 10,500 pounds  
1-8 12,000 pounds  
1-9 13,500 pounds  
1-10 15,000 pounds  
1-11 16,500 pounds  
1-12 18,000 pounds

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual solvent usage limitation shall be based upon a rolling, 12-month summation of the solvent usage figures.

3. The additive organic compound (OC) volatiles from P005, P007, P008, P009, and P010 shall not exceed 4104 pounds per year, based upon a rolling, 12-month summation of the monthly additive OC volatiles usage.

To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the additive OC volatiles levels specified in the following table:

Maximum Allowable  
Cumulative Additive  
Month(s) OC volatiles Usage

1 342 pounds  
1-2 684 pounds  
1-3 1026 pounds  
1-4 1368 pounds  
1-5 1710 pounds  
1-6 2052 pounds  
1-7 2394 pounds  
1-8 2736 pounds  
1-9 3078 pounds  
1-10 3420 pounds  
1-11 3762 pounds  
1-12 4104 pounds

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual additive OC volatiles limitation shall be based upon a rolling, 12-month summation of the monthly amount of additive OC volatiles usage figures.

**C. Monitoring and/or Record Keeping Requirements**

1. The permittee shall maintain records which document that each material employed in this emissions unit meets the criteria specified in B.1 above.
2. The permittee shall maintain monthly records of the following information:
  - a. the solvent usage, in pounds;
  - b. the additive OC volatiles usage, in pounds; and
  - c. beginning after the first 12 calendar months of operation following the issuance of this permit, the rolling, 12-month summation of the solvent usage figures and the additive OC volatiles usage figures.
 

Also, during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative solvent usage and the cumulative additive OC volatiles usage for each calendar month.
  - d. the Stoddard solvent weight percent in the plastisol.

- e. the plastisol production rate.
3. The permit to install for this emissions unit (P007) was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):
- Pollutant: Stoddard solvent (additive OC)
- TLV (mg/m3): 572
- Maximum Hourly Emission Rate (lbs/hr): 2.22
- Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 495.6
- MAGLC (ug/m3): 13,628
4. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:
- 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 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 pollutant with a listed TLV that was proposed in the application and modeled; and
- c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).
- If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.
5. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will satisfy the "Air Toxics Policy:"
- a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
- b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
- c. where computer modeling is performed, 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 deviation (excursion) reports which identify any material employed which does not meet the criteria in B.1 above. The report shall be submitted within 45 days of the occurrence.
2. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month usage limitations for solvent and additive OC volatiles and, for the first 12 calendar months of operation following the issuance of this permit, all exceedances of the maximum allowable cumulative usage levels. These reports are by the date described in Part 1 - General Terms and Conditions of this permit under section (A)(1).
- E. Testing Requirements**
1. Compliance with the emission limitations in A.1 above shall be determined in accordance with the following methods:
- Emission Limitation:
- 20.73 lbs/hr of organic compounds (OC)
- Applicable Compliance Method:
- Compliance shall be determined by totaling the following products for each emissions unit:
- i. plastisol emissions
- Multiply the maximum weight percent of solvent in the plastisol by the maximum production rate.
- ii. natural gas combustion
- Multiply the AP-42 organic compound emission factor of 5.5 pounds of organic compound emissions per million cubic feet of natural gas fired by the maximum hourly amount of natural gas fired or use OAC rule

3745-21-10(C).

Emission Limitation:

2.22 lbs/hr of Stoddard solvent (additive OC)

Applicable Compliance Method

Multiply the maximum weight percent of Stoddard solvent in the plastisol by the maximum production rate.

Emission Limitation:

0.052 tpy of particulate emissions

Applicable Compliance Method:

Multiply the AP-42 particulate emission factor of 7.6 pounds of particulate emissions per million cubic feet of natural gas fired by the maximum hourly amount of natural gas fired times 8760 hours and divide by 2000 lbs/ton.

Emission Limitation:

0.688 tpy of nitrogen oxides (NOx)

Applicable Compliance Method:

Multiply the AP-42 nitrogen oxides emission factor of 100.0 pounds of nitrogen oxides emissions per million cubic feet of natural gas fired by the maximum hourly amount of natural gas fired times 8760 hours and divide by 2000 lbs/ton.

Emission Limitation:

0.578 tpy of carbon monoxide (CO)

Applicable Compliance Method:

Multiply the AP-42 carbon monoxide emission factor of 84.0 pounds of carbon monoxide emissions per million cubic feet of natural gas fired by the maximum hourly amount of natural gas fired times 8760 hours and divide by 2000 lbs/ton.

Emission Limitation:

0.004 tpy of sulfur dioxide (SO<sub>2</sub>)

Applicable Compliance Method:

Multiply the AP-42 sulfur dioxide emission factor of 0.6 pound of sulfur dioxide emissions per million cubic feet of natural gas fired by the maximum hourly amount of natural gas fired times 8760 hours and divide by 2000 lbs/ton.

Emission Limitation:

11.25 tons of OC per rolling, 12-month period for P004 through P010

Applicable Compliance Method:

Compliance shall be determined by totaling the following:

i. plastisol emissions

Monthly record keeping of the solvent and additive OC volatiles usage for P004, P005, P006, P007, P008, P009, and P010 as required in C.2 and C.3.

ii. natural gas combustion

Multiply the AP-42 organic compound emission factor of 5.5 pounds of organic compound emissions per million cubic feet of natural gas fired by the maximum yearly amount of natural gas fired and divided by 2000 lbs/ton.

**F. Miscellaneous Requirements**

1. This permit to install shall supersede all the air pollution control requirements for these emissions units previously contained in permit to install number 16-1709, as issued on March 10, 1999.
2. In accordance with OAC rule 3745-31-05(D), sections II.A.1, II.B.2, II.B.3, II.C.1, II.C.2, II.C.3, II.D.1, and II.D.2 of these terms and conditions constitute the federally enforceable portions of this permit.

\*\*\*THIS IS NOT AN OFFICIAL VERSION OF THE PERMIT. SEE PAGE 1 FOR ADDITIONAL INFORMATION\*\*\*

**Facility ID: 1677120007 Emissions Unit ID: P008 Issuance type: Final State Permit To Operate**

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**Part II - Special Terms and Conditions**

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

1. For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
  - (a) None.
2. For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
  - (a) None.

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

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Plastisol dip molding with natural gas oven - unit #8 with a capacity of 350 lbs/hr	OAC rule 3745-31-05(A)(3) (PTI #16-01945)	The requirements of this rule also include compliance with requirements of OAC rule 3745-21-07(G)(2) and 3745-31-05(D).  19.61 lbs/hr of organic compounds (OC);  2.1 lbs/hr of Stoddard solvent*  *The Stoddard solvent is included in the allowable mass emissions for OC.  0.052 tpy of particulate emissions  0.688 tpy of nitrogen oxides (NOx)  0.578 tpy of carbon monoxide (CO)  0.004 tpy of sulfur dioxide (SO2)  11.25 tons of OC per rolling, 12-month period for P004 through P010
	OAC rule 3745-31-05(D)	Exempt from the requirements of this rule pursuant to term B.1 below.
	OAC rule 3745-21-07(G)(2)	

2. **Additional Terms and Conditions**
  - (a) None

**B. Operational Restrictions**

1. The permittee shall only employ materials in this emissions unit which meet the following criteria either pursuant to OAC rule 3745-21-07(G)(9)(c) or pursuant to OAC rule 3745-21-07(G)(9)(d):
  - OAC rule 3745-21-07(G)(9)(c):
    - a. the volatile content of such material consists only of water and liquid organic material; and
    - b. the liquid organic material comprises not more than twenty percent of said volatile content; and
    - c. the volatile content is not a photochemically reactive material.
  - OAC rule 3745-21-07(G)(9)(d):
    - d. the volatile content of such material does not exceed twenty percent by volume of said material; and
    - e. the volatile content is not a photochemically reactive material.
2. The maximum annual solvent usage for P005, P007, P008, P009 and P010 shall not exceed 18,000 pounds per year, based upon a rolling, 12-month summation of the solvent usage figures.
 

To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the solvent usage levels specified in the following table:

Maximum Allowable
Month(s) Cumulative Solvent Usage
1 1500 pounds
1-2 3000 pounds
1-3 4500 pounds
1-4 6000 pounds

- 1-5 7500 pounds
- 1-6 9000 pounds
- 1-7 10,500 pounds
- 1-8 12,000 pounds
- 1-9 13,500 pounds
- 1-10 15,000 pounds
- 1-11 16,500 pounds
- 1-12 18,000 pounds

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual solvent usage limitation shall be based upon a rolling, 12-month summation of the solvent usage figures.

3. The additive organic compound (OC) volatiles from P005, P007, P008, P009, and P010 shall not exceed 4104 pounds per year, based upon a rolling, 12-month summation of the monthly additive OC volatiles usage.

To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the additive OC volatiles levels specified in the following table:

Maximum Allowable Cumulative Additive Month(s) OC volatiles Usage
---

- |      |             |
|------|-------------|
| 1    | 342 pounds  |
| 1-2  | 684 pounds  |
| 1-3  | 1026 pounds |
| 1-4  | 1368 pounds |
| 1-5  | 1710 pounds |
| 1-6  | 2052 pounds |
| 1-7  | 2394 pounds |
| 1-8  | 2736 pounds |
| 1-9  | 3078 pounds |
| 1-10 | 3420 pounds |
| 1-11 | 3762 pounds |
| 1-12 | 4104 pounds |

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual additive OC volatiles limitation shall be based upon a rolling, 12-month summation of the monthly amount of additive OC volatiles usage figures.

**C. Monitoring and/or Record Keeping Requirements**

1. The permittee shall maintain records which document that each material employed in this emissions unit meets the criteria specified in B.1 above.
2. The permittee shall maintain monthly records of the following information:
  - a. the solvent usage, in pounds;
  - b. the additive OC volatiles usage, in pounds; and
  - c. beginning after the first 12 calendar months of operation following the issuance of this permit, the rolling, 12-month summation of the solvent usage figures and the additive OC volatiles usage figures.
 

Also, during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative solvent usage and the cumulative additive OC volatiles usage for each calendar month.
  - d. the Stoddard solvent weight percent in the plastisol.
  - e. the plastisol production rate.

3. The permit to install for this emissions unit (P008) was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Stoddard solvent (additive OC)

TLV (mg/m3): 572

Maximum Hourly Emission Rate (lbs/hr): 2.1

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 832.4

MAGLC (ug/m3): 13,628

4. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be still satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

- 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 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 pollutant with a listed TLV that was proposed in the application and modeled; and
- c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

- 5. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will satisfy the "Air Toxics Policy:"
  - a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
  - b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
  - c. where computer modeling is performed, 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 deviation (excursion) reports which identify any material employed which does not meet the criteria in B.1 above. The report shall be submitted within 45 days of the occurrence.
- 2. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month usage limitations for solvent and additive OC volatiles and, for the first 12 calendar months of operation following the issuance of this permit, all exceedances of the maximum allowable cumulative usage levels. These reports are by the date described in Part 1 - General Terms and Conditions of this permit under section (A)(1).

**E. Testing Requirements**

- 1. Compliance with the emission limitations in A.1 above shall be determined in accordance with the following methods:  
 Emission Limitation:  
 19.61 lbs/hr of organic compounds (OC)  
 Applicable Compliance Method:  
 Compliance shall be determined by totaling the following products for each emissions unit:
  - i. plastisol emissions  
 Multiply the maximum weight percent of solvent in the plastisol by the maximum production rate.
  - ii. natural gas combustion  
 Multiply the AP-42 organic compound emission factor of 5.5 pounds of organic compound emissions per million cubic feet of natural gas fired by the maximum hourly amount of natural gas fired or use OAC rule 3745-21-10(C).

Emission Limitation:

2.1 lbs/hr of Stoddard solvent (additive OC)

Applicable Compliance Method

Multiply the maximum weight percent of Stoddard solvent in the plastisol by the maximum production rate.

Emission Limitation:

0.052 tpy of particulate emissions

Applicable Compliance Method:

Multiply the AP-42 particulate emission factor of 7.6 pounds of particulate emissions per million cubic feet of natural gas fired by the maximum hourly amount of natural gas fired times 8760 hours and divide by 2000 lbs/ton.

Emission Limitation:

0.688 tpy of nitrogen oxides (NOx)

Applicable Compliance Method:

Multiply the AP-42 nitrogen oxides emission factor of 100.0 pounds of nitrogen oxides emissions per million cubic feet of natural

gas fired by the maximum hourly amount of natural gas fired times 8760 hours and divide by 2000 lbs/ton.  
Emission Limitation:

0.578 tpy of carbon monoxide (CO)

Applicable Compliance Method:

Multiply the AP-42 carbon monoxide emission factor of 84.0 pounds of carbon monoxide emissions per million cubic feet of natural gas fired by the maximum hourly amount of natural gas fired times 8760 hours and divide by 2000 lbs/ton.  
Emission Limitation:

0.004 tpy of sulfur dioxide (SO2)

Applicable Compliance Method:

Multiply the AP-42 sulfur dioxide emission factor of 0.6 pound of sulfur dioxide emissions per million cubic feet of natural gas fired by the maximum hourly amount of natural gas fired times 8760 hours and divide by 2000 lbs/ton.  
Emission Limitation:

11.25 tons of OC per rolling, 12-month period for P004 through P010

Applicable Compliance Method:

Compliance shall be determined by totaling the following:

- i. plastisol emissions
  - Monthly record keeping of the solvent and additive OC volatiles usage for P004, P005, P006, P007, P008, P009, and P010 as required in C.2 and C.3.
- ii. natural gas combustion
  - Multiply the AP-42 organic compound emission factor of 5.5 pounds of organic compound emissions per million cubic feet of natural gas fired by the maximum yearly amount of natural gas fired and divided by 2000 lbs/ton.

**F. Miscellaneous Requirements**

- 1. This permit to install shall supersede all the air pollution control requirements for these emissions units previously contained in permit to install number 16-1709, as issued on March 10, 1999.
- 2. In accordance with OAC rule 3745-31-05(D), sections II.A.1, II.B.2, II.B.3, II.C.1, II.C.2, II.C.3, II.D.1, and II.D.2 of these terms and conditions constitute the federally enforceable portions of this permit.

\*\*\*THIS IS NOT AN OFFICIAL VERSION OF THE PERMIT. SEE PAGE 1 FOR ADDITIONAL INFORMATION\*\*\*

**Facility ID: 1677120007 Emissions Unit ID: P009 Issuance type: Final State Permit To Operate**

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**Part II - Special Terms and Conditions**

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

- 1. For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
  - (a) None.
- 2. For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
  - (a) None.

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

- 1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Plastisol dip molding with natural gas oven - unit #9 with a capacity of 500 lbs/hr	OAC rule 3745-31-05(A)(3) (PTI #16-01945)	The requirements of this rule also include compliance with requirements of OAC rule 3745-21-07(G)(2) and 3745-31-05(D).  28.01 lbs/hr of organic compounds (OC);

3.0 lbs/hr of Stoddard solvent\*

\*The Stoddard solvent is included in the allowable mass emissions for OC.

0.052 tpy of particulate emissions

0.688 tpy of nitrogen oxides (NOx)

0.578 tpy of carbon monoxide (CO)

0.004 tpy of sulfur dioxide (SO2)

11.25 tons of OC per rolling, 12-month period for P004 through P010

Exempt from the requirements of this rule pursuant to term B.1 below.

OAC rule 3745-31-05(D)

OAC rule 3745-21-07(G)(2)

2. **Additional Terms and Conditions**

(a) None

B. **Operational Restrictions**

1. The permittee shall only employ materials in this emissions unit which meet the following criteria either pursuant to OAC rule 3745-21-07(G)(9)(c) or pursuant to OAC rule 3745-21-07(G)(9)(d):

OAC rule 3745-21-07(G)(9)(c):

- a. the volatile content of such material consists only of water and liquid organic material; and
- b. the liquid organic material comprises not more than twenty percent of said volatile content; and
- c. the volatile content is not a photochemically reactive material.

OAC rule 3745-21-07(G)(9)(d):

- d. the volatile content of such material does not exceed twenty percent by volume of said material; and
- e. the volatile content is not a photochemically reactive material.

2. The maximum annual solvent usage for P005, P007, P008, P009 and P010 shall not exceed 18,000 pounds per year, based upon a rolling, 12-month summation of the solvent usage figures.

To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the solvent usage levels specified in the following table:

Maximum Allowable  
Month(s) Cumulative Solvent Usage

- 1 1500 pounds
- 1-2 3000 pounds
- 1-3 4500 pounds
- 1-4 6000 pounds
- 1-5 7500 pounds
- 1-6 9000 pounds
- 1-7 10,500 pounds
- 1-8 12,000 pounds
- 1-9 13,500 pounds
- 1-10 15,000 pounds
- 1-11 16,500 pounds
- 1-12 18,000 pounds

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual solvent usage limitation shall be based upon a rolling, 12-month summation of the solvent usage figures.

3. The additive organic compound (OC) volatiles from P005, P007, P008, P009, and P010 shall not exceed 4104 pounds per year, based upon a rolling, 12-month summation of the monthly additive OC volatiles usage.

To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the additive OC volatiles levels specified in the following table:

Maximum Allowable  
Cumulative Additive  
Month(s) OC volatiles Usage

- 1 342 pounds
- 1-2 684 pounds
- 1-3 1026 pounds

- 1-4 1368 pounds
- 1-5 1710 pounds
- 1-6 2052 pounds
- 1-7 2394 pounds
- 1-8 2736 pounds
- 1-9 3078 pounds
- 1-10 3420 pounds
- 1-11 3762 pounds
- 1-12 4104 pounds

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual additive OC volatiles limitation shall be based upon a rolling, 12-month summation of the monthly amount of additive OC volatiles usage figures.

**C. Monitoring and/or Record Keeping Requirements**

1. The permittee shall maintain records which document that each material employed in this emissions unit meets the criteria specified in B.1 above.
2. The permittee shall maintain monthly records of the following information:
  - a. the solvent usage, in pounds;
  - b. the additive OC volatiles usage, in pounds; and
  - c. beginning after the first 12 calendar months of operation following the issuance of this permit, the rolling, 12-month summation of the solvent usage figures and the additive OC volatiles usage figures.

Also, during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative solvent usage and the cumulative additive OC volatiles usage for each calendar month.

- d. the Stoddard solvent weight percent in the plastisol.
  - e. the plastisol production rate.
3. The permit to install for this emissions unit (P009) was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Stoddard solvent (additive OC)

TLV (mg/m3): 572

Maximum Hourly Emission Rate (lbs/hr): 3.0

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1111

MAGLC (ug/m3): 13,628

4. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:
  - 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 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 pollutant with a listed TLV that was proposed in the application and modeled; and
  - c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.
5. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will satisfy the "Air Toxics Policy":
  - a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
  - b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and

- c. where computer modeling is performed, 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 deviation (excursion) reports which identify any material employed which does not meet the criteria in B.1 above. The report shall be submitted within 45 days of the occurrence.
2. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month usage limitations for solvent and additive OC volatiles and, for the first 12 calendar months of operation following the issuance of this permit, all exceedances of the maximum allowable cumulative usage levels. These reports are by the date described in Part 1 - General Terms and Conditions of this permit under section (A)(1).

**E. Testing Requirements**

1. Compliance with the emission limitations in A.1 above shall be determined in accordance with the following methods:  
Emission Limitation:  
  
28.01 lbs/hr of organic compounds (OC)  
  
Applicable Compliance Method:  
  
Compliance shall be determined by totaling the following products for each emissions unit:
  - i. plastisol emissions  
  
Multiply the maximum weight percent of solvent in the plastisol by the maximum production rate.
  - ii. natural gas combustion  
  
Multiply the AP-42 organic compound emission factor of 5.5 pounds of organic compound emissions per million cubic feet of natural gas fired by the maximum hourly amount of natural gas fired or use OAC rule 3745-21-10(C).

Emission Limitation:

3.0 lbs/hr of Stoddard solvent (additive OC)

Applicable Compliance Method

Multiply the maximum weight percent of Stoddard solvent in the plastisol by the maximum production rate.

Emission Limitation:

0.052 tpy of particulate emissions

Applicable Compliance Method:

Multiply the AP-42 particulate emission factor of 7.6 pounds of particulate emissions per million cubic feet of natural gas fired by the maximum hourly amount of natural gas fired times 8760 hours and divide by 2000 lbs/ton.

Emission Limitation:

0.688 tpy of nitrogen oxides (NOx)

Applicable Compliance Method:

Multiply the AP-42 nitrogen oxides emission factor of 100.0 pounds of nitrogen oxides emissions per million cubic feet of natural gas fired by the maximum hourly amount of natural gas fired times 8760 hours and divide by 2000 lbs/ton.

Emission Limitation:

0.578 tpy of carbon monoxide (CO)

Applicable Compliance Method:

Multiply the AP-42 carbon monoxide emission factor of 84.0 pounds of carbon monoxide emissions per million cubic feet of natural gas fired by the maximum hourly amount of natural gas fired times 8760 hours and divide by 2000 lbs/ton.

Emission Limitation:

0.004 tpy of sulfur dioxide (SO<sub>2</sub>)

Applicable Compliance Method:

Multiply the AP-42 sulfur dioxide emission factor of 0.6 pound of sulfur dioxide emissions per million cubic feet of natural gas fired by the maximum hourly amount of natural gas fired times 8760 hours and divide by 2000 lbs/ton.

Emission Limitation:

11.25 tons of OC per rolling, 12-month period for P004 through P010

Applicable Compliance Method:

Compliance shall be determined by totaling the following:

i. plastisol emissions

Monthly record keeping of the solvent and additive OC volatiles usage for P004, P005, P006, P007, P008, P009, and P010 as required in C.2 and C.3.

ii. natural gas combustion

Multiply the AP-42 organic compound emission factor of 5.5 pounds of organic compound emissions per million cubic feet of natural gas fired by the maximum yearly amount of natural gas fired and divided by 2000 lbs/ton.

**F. Miscellaneous Requirements**

1. This permit to install shall supersede all the air pollution control requirements for these emissions units previously contained in permit to install number 16-1709, as issued on March 10, 1999.
2. In accordance with OAC rule 3745-31-05(D), sections II.A.1, II.B.2, II.B.3, II.C.1, II.C.2, II.C.3, II.D.1, and II.D.2 of these terms and conditions constitute the federally enforceable portions of this permit.

\*\*\*THIS IS NOT AN OFFICIAL VERSION OF THE PERMIT. SEE PAGE 1 FOR ADDITIONAL INFORMATION\*\*\*

**Facility ID: 1677120007 Emissions Unit ID: P010 Issuance type: Final State Permit To Operate**

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**Part II - Special Terms and Conditions**

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

1. For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
  - (a) None.
2. For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
  - (a) None.

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

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Plastisol dip molding with natural gas oven - unit #10 with a capacity of 450 lbs/hr	OAC rule 3745-31-05(A)(3) (PTI #16-01945)	The requirements of this rule also include compliance with requirements of OAC rule 3745-21-07(G)(2) and 3745-31-05(D).  25.21 lbs/hr of organic compounds (OC);  2.7 lbs/hr of Stoddard solvent*  *The Stoddard solvent is included in the allowable mass emissions for OC.  0.052 tpy of particulate emissions  0.688 tpy of nitrogen oxides (NOx)  0.578 tpy of carbon monoxide (CO)  0.004 tpy of sulfur dioxide (SO2)  11.25 tons of OC per rolling, 12-month period for P004 through P010
	OAC rule 3745-31-05(D)	Exempt from the requirements of this rule pursuant to term B.1 below.
	OAC rule 3745-21-07(G)(2)	

2. **Additional Terms and Conditions**

(a) None

**B. Operational Restrictions**

1. The permittee shall only employ materials in this emissions unit which meet the following criteria either pursuant to OAC rule 3745-21-07(G)(9)(c) or pursuant to OAC rule 3745-21-07(G)(9)(d):

OAC rule 3745-21-07(G)(9)(c):

- a. the volatile content of such material consists only of water and liquid organic material; and
- b. the liquid organic material comprises not more than twenty percent of said volatile content; and
- c. the volatile content is not a photochemically reactive material.

OAC rule 3745-21-07(G)(9)(d):

- d. the volatile content of such material does not exceed twenty percent by volume of said material; and
  - e. the volatile content is not a photochemically reactive material.
2. The maximum annual solvent usage for P005, P007, P008, P009 and P010 shall not exceed 18,000 pounds per year, based upon a rolling, 12-month summation of the solvent usage figures.

To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the solvent usage levels specified in the following table:

Maximum Allowable  
Month(s) Cumulative Solvent Usage

- 1 1500 pounds
- 1-2 3000 pounds
- 1-3 4500 pounds
- 1-4 6000 pounds
- 1-5 7500 pounds
- 1-6 9000 pounds
- 1-7 10,500 pounds
- 1-8 12,000 pounds
- 1-9 13,500 pounds
- 1-10 15,000 pounds
- 1-11 16,500 pounds
- 1-12 18,000 pounds

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual solvent usage limitation shall be based upon a rolling, 12-month summation of the solvent usage figures.

3. The additive organic compound (OC) volatiles from P005, P007, P008, P009, and P010 shall not exceed 4104 pounds per year, based upon a rolling, 12-month summation of the monthly additive OC volatiles usage.

To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the additive OC volatiles levels specified in the following table:

Maximum Allowable  
Cumulative Additive  
Month(s) OC volatiles Usage

- 1 342 pounds
- 1-2 684 pounds
- 1-3 1026 pounds
- 1-4 1368 pounds
- 1-5 1710 pounds
- 1-6 2052 pounds
- 1-7 2394 pounds
- 1-8 2736 pounds
- 1-9 3078 pounds
- 1-10 3420 pounds
- 1-11 3762 pounds
- 1-12 4104 pounds

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual additive OC volatiles limitation shall be based upon a rolling, 12-month summation of the monthly amount of additive OC volatiles usage figures.

**C. Monitoring and/or Record Keeping Requirements**

1. The permittee shall maintain records which document that each material employed in this emissions unit meets the criteria specified in B.1 above.
2. The permittee shall maintain monthly records of the following information:
  - a. the solvent usage, in pounds;
  - b. the additive OC volatiles usage, in pounds; and
  - c. beginning after the first 12 calendar months of operation following the issuance of this permit, the rolling, 12-month summation of the solvent usage figures and the additive OC volatiles usage figures.

Also, during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative solvent usage and the cumulative additive OC volatiles usage for each calendar month.

- d. the Stoddard solvent weight percent in the plastisol.
  - e. the plastisol production rate.
3. The permit to install for this emissions unit (P010) was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):
- Pollutant: Stoddard solvent (additive OC)
- TLV (mg/m3): 572
- Maximum Hourly Emission Rate (lbs/hr): 2.7
- Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 398.1
- MAGLC (ug/m3): 13,628
4. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:
- 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 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 pollutant with a listed TLV that was proposed in the application and modeled; and
  - c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).
- If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.
5. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will satisfy the "Air Toxics Policy:"
- a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
  - b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
  - c. where computer modeling is performed, 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 deviation (excursion) reports which identify any material employed which does not meet the criteria in B.1 above. The report shall be submitted within 45 days of the occurrence.
- 2. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month usage limitations for solvent and additive OC volatiles and, for the first 12 calendar months of operation following the issuance of this permit, all exceedances of the maximum allowable cumulative usage levels. These reports are by the date described in Part 1 - General Terms and Conditions of this permit under section (A)(1).

#### E. Testing Requirements

- 1. Compliance with the emission limitations in A.1 above shall be determined in accordance with the following methods:  
Emission Limitation:  
25.21 lbs/hr of organic compounds (OC)  
Applicable Compliance Method:  
Compliance shall be determined by totaling the following products for each emissions unit:
  - i. plastisol emissions

Multiply the maximum weight percent of solvent in the plastisol by the maximum production rate.

ii. natural gas combustion

Multiply the AP-42 organic compound emission factor of 5.5 pounds of organic compound emissions per million cubic feet of natural gas fired by the maximum hourly amount of natural gas fired or use OAC rule 3745-21-10(C).

Emission Limitation:

2.7 lbs/hr of Stoddard solvent (additive OC)

Applicable Compliance Method

Multiply the maximum weight percent of Stoddard solvent in the plastisol by the maximum production rate.

Emission Limitation:

0.052 tpy of particulate emissions

Applicable Compliance Method:

Multiply the AP-42 particulate emission factor of 7.6 pounds of particulate emissions per million cubic feet of natural gas fired by the maximum hourly amount of natural gas fired times 8760 hours and divide by 2000 lbs/ton.

Emission Limitation:

0.688 tpy of nitrogen oxides (NOx)

Applicable Compliance Method:

Multiply the AP-42 nitrogen oxides emission factor of 100.0 pounds of nitrogen oxides emissions per million cubic feet of natural gas fired by the maximum hourly amount of natural gas fired times 8760 hours and divide by 2000 lbs/ton.

Emission Limitation:

0.578 tpy of carbon monoxide (CO)

Applicable Compliance Method:

Multiply the AP-42 carbon monoxide emission factor of 84.0 pounds of carbon monoxide emissions per million cubic feet of natural gas fired by the maximum hourly amount of natural gas fired times 8760 hours and divide by 2000 lbs/ton.

Emission Limitation:

0.004 tpy of sulfur dioxide (SO<sub>2</sub>)

Applicable Compliance Method:

Multiply the AP-42 sulfur dioxide emission factor of 0.6 pound of sulfur dioxide emissions per million cubic feet of natural gas fired by the maximum hourly amount of natural gas fired times 8760 hours and divide by 2000 lbs/ton.

Emission Limitation:

11.25 tons of OC per rolling, 12-month period for P004 through P010

Applicable Compliance Method:

Compliance shall be determined by totaling the following:

i. plastisol emissions

Monthly record keeping of the solvent and additive OC volatiles usage for P004, P005, P006, P007, P008, P009, and P010 as required in C.2 and C.3.

ii. natural gas combustion

Multiply the AP-42 organic compound emission factor of 5.5 pounds of organic compound emissions per million cubic feet of natural gas fired by the maximum yearly amount of natural gas fired and divided by 2000 lbs/ton.

**F. Miscellaneous Requirements**

1. This permit to install shall supersede all the air pollution control requirements for these emissions units previously contained in permit to install number 16-1709, as issued on March 10, 1999.
2. In accordance with OAC rule 3745-31-05(D), sections II.A.1, II.B.2, II.B.3, II.C.1, II.C.2, II.C.3, II.D.1, and II.D.2 of these terms and conditions constitute the federally enforceable portions of this permit.