

Facility ID: 0285000381 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.

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Facility ID: 0285000381 Emissions Unit ID: R001 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>   |
|---|---|--|
| spray booth #1 with dry filter                | OAC rule 3745-31-05(A)(3)<br>(PTI 02-16207)               | 65 lbs of volatile organic compounds (VOC) per day on any day when only metal parts are coated   |
|   |   | 11.9 TPY of VOC  |
|   | OAC rule 3745-35-07(B)                                    | 1.4 TPY of VOC from clean-up operations facility-wide<br>less than 10 TPY, as a rolling, 12-month summation, of any individual hazardous air pollutant (HAP) from the entire facility              |
|   | OAC rule 3745-21-09(U)(1)(d)<br>OAC rule 3745-21-07(G)(2) | less than 25 TPY, as a rolling, 12-month summation, of total HAPs from the entire facility<br>See section A.2.a.<br>8 lbs of OC/hr and 40 lbs of OC/day on any day when non-metal parts are coated |

**2. Additional Terms and Conditions**

- (a) 4.3 pounds of VOC per gallon of coating, excluding water and exempt solvents, for a clear coating;
- 3.5 pounds of VOC per gallon of coating, excluding water and exempt solvents, for an extreme performance coating;
- 6.2 pounds of VOC per gallon of coating, excluding water and exempt solvents, for a high performance architectural aluminum coating; or
- 3.0 pounds of VOC per gallon of coating, excluding water and exempt solvents, for any type of coating that is not described above.

The types of coatings described above are defined in OAC rule 3745-21-01.

**B. Operational Restrictions**

1. Filters for particulate emissions shall be maintained in good working order at all times when the booth is in operation.

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

1. The permittee shall collect and record the following information for each day when metal parts are coated:
  - a. The name, identification number, and type (in order to identify the appropriate limit in section A.2.a. of these terms and conditions) of each coating employed for metal parts, as applied.
  - b. The VOC content (excluding water and exempt solvents) and the number of gallons of each coating employed for metal parts, as applied.
  - c. The daily volume-weighted average VOC content of all coatings employed for metal parts, as applied, calculated in accordance with the equation specified in paragraph (B)(9) of OAC rule 3745-21-10.
2. The permittee shall collect and record the following information for each day for the coating operation:
  - a. The company identification for each coating employed.
  - b. The number of gallons of each coating employed.
  - c. The OC/VOC content of each coating, in pounds per gallon.
  - d. The total OC/VOC emission rate for all coatings [i.e., summation of (b) x (c) for each coating employed], in pounds per day.
  - e. The number of hours of operation for the booth.
  - f. What type of material (metal or non-metal) was coated each day the emissions unit was in operation.
  - g. On days when non-metal parts were coated, the average hourly emission OC rate (d / e), in pounds per hour.

[Note: The coating information must be for the coatings as employed, including any thinning solvents added at the emissions unit.]
3. The permittee shall collect and record the following information for each month for the entire facility:
  - a. The company identification for each cleanup material employed.
  - b. The number of gallons of each cleanup material employed.
  - c. The VOC content of each cleanup material, in pounds per gallon.
  - d. The total VOC emission rate for all cleanup materials employed [i.e., summation of (b) x (c) for each coating employed], in pounds per month.
  - e. The amount of cleanup material recovered, in pounds.
  - f. The total monthly VOC emissions from cleanup operations, calculated as (d) - (e), in pounds.
4. The permittee shall collect and record the following information each month for the facility:
  - a. The name and identification number of each coating, as applied.
  - b. The individual hazardous air pollutant (HAP)\* content for each HAP of each coating, as applied, as a weight fraction.
  - c. The total combined HAP content for each HAP of each coating, as applied, as a weight fraction (sum all the individual HAP contents from b).
  - d. The number of gallons of each coating employed.
  - e. The density of each coating employed.
  - f. The name and identification of each cleanup material employed.
  - g. The individual HAP content for each HAP of each cleanup material, as applied, as a weight fraction.
  - h. The total combined HAP content of each cleanup material, as applied, as a weight fraction (sum all the individual HAP contents from f).
  - i. The number of gallons of each cleanup material employed.
  - j. The density of each cleanup material employed.
  - k. The total individual HAP emissions 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 [for each HAP the sum of (b) x (d) x (e) for each coating and the sum of (g) x (i) x (j) for each cleanup material].
  - l. 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 [the sum of (c) x (d) x (e) for each coating plus the sum of (g) x (i) x (j) for each cleanup material].

\* A listing of the HAPs can be found in Section 112(b) of the Clean Air Act or can be obtained by contacting the Northeast District Office of the Ohio EPA. Material Safety Data Sheets typically include a listing of the solvents contained in the coatings or cleanup materials. This information does not have to be kept on a line-by-line basis.
5. The permit to install for this emissions unit 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: Methyl n-Amyl Ketone  
 Pollutant TLV (mg/m3): 233.5  
 Maximum Hourly Emission Rate (lbs/hr): 3.5  
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 101.8  
 MAGLC (ug/m3): 5,559.5

Pollutant: Isobutyl Acetate  
 Pollutant TLV (mg/m3): 712.6  
 Maximum Hourly Emission Rate (lbs/hr): 0.4  
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 11.6 MAGLC (ug/m3): 16,967

Pollutant: Toluene  
 Pollutant TLV (mg/m3): 188.0  
 Maximum Hourly Emission Rate (lbs/hr): 0.5  
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 16.1 MAGLC (ug/m3): 4,485

Pollutant: Butyl Acetate  
 Pollutant TLV (mg/m3): 712.6  
 Maximum Hourly Emission Rate (lbs/hr): 1.6  
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 46.3 MAGLC (ug/m3): 16,967

Pollutant: Cyclohexanone  
 Pollutant TLV (mg/m3): 96.3  
 Maximum Hourly Emission Rate (lbs/hr): 1.0  
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 30.1 MAGLC (ug/m3): 2,292  
 Pollutant: Methyl Ethyl Ketone  
 Pollutant TLV (mg/m3): 589.0  
 Maximum Hourly Emission Rate (lbs/hr): 1.8  
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 53.2 MAGLC (ug/m3): 14,042

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.).
6. 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 solely due to the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing permit to install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) is (are) defined as a modification under other provisions of the modification definition, then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic 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 quarterly deviation (excursion) reports that identify each day when the daily volume-weighted average coating VOC content exceeds the appropriate limit in section A.2.a of these terms and conditions, when coating metal parts.
  2. The permittee shall submit quarterly deviation (excursion) reports that identify each day when non-metal materials were coated and the average daily OC emissions exceeded 8 lbs/hr or 40 pounds and the actual emissions for each such day.
  3. The permittee shall submit quarterly deviation (excursion) reports that identify each day when only metal parts were coated and the average daily VOC emissions exceeded 65 pounds and the actual emissions for each such day.

4. The permittee shall submit deviation (excursion) reports that identify each year when the VOC emissions from cleanup materials exceeded 1.4 tons and the actual emissions for each such year.
5. The permittee shall submit deviation (excursion) reports that identify each month when the total HAPs emissions met or exceeded 25 tons per rolling, 12-month period and the actual emissions for each such 12-month period.
6. The permittee shall submit deviation (excursion) reports that identify each month when the emissions of each individual HAP met or exceeded 10 tons per rolling, 12-month period and the actual emissions for each such 12-month period.
7. The permittee shall submit deviation (excursion) reports that identify each year when the VOC emissions exceeded 11.9 tons and the actual emissions for each such year.
8. The quarterly deviation reports shall be submitted in accordance with Section I.A.1.c. of this permit.

**E. Testing Requirements**

1. Compliance with the emission limitations in section A.I. of these terms and conditions shall be determined in accordance with the following method(s):
 

Emission Limitation:  
The appropriate limit from section A.2.a. of these terms and conditions, in lbs of VOC per gallon of coating, excluding water and exempt solvents, as a daily, volume-weighted average, for coatings used to coat metal parts

Applicable Compliance Method:  
Compliance shall be determined based upon the record keeping specified in section C.1. of these terms and conditions.

Emission Limitation:  
8 lbs of OC per hour and 40 lbs of OC per day on any day when non-metal parts are coated

Applicable Compliance Method:  
Compliance shall be determined based upon the record keeping specified in section C.2. of these terms and conditions.

Emission Limitation:  
65 lbs of VOC per day on any day only metal parts are coated

Applicable Compliance Method:  
Compliance shall be demonstrated based upon the record keeping specified in section C.2. of these terms and conditions.

Emission Limitation:  
11.9 tons VOC per year from the coating operations

Applicable Compliance Method:  
Compliance shall be determined by summing the daily emissions determined from the record keeping specified in section C.2. of these terms and conditions.

Emission Limitation:  
1.4 tons VOC per year for cleanup operations facility-wide

Applicable Compliance Method:  
Compliance shall be determined based upon the record keeping specified in section C.3. of these terms and conditions.

Emission Limitations:  
less than 10 TPY, as a rolling, 12-month summation, of any individual HAP from the entire facility

less than 25 TPY, as a rolling, 12-month summation, of total HAPs from the entire facility

Applicable Compliance Method:  
Compliance shall be determined based upon the record keeping specified in section C.4. of these terms and conditions.

**F. Miscellaneous Requirements**

1. None

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**Facility ID: 0285000381 Emissions Unit ID: R002 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>   |
|---|---|--|
| spray booth #2 with dry filter                | OAC rule 3745-31-05(A)(3)<br>(PTI 02-16207)               | 65 lbs of volatile organic compounds (VOC) per day on any day when only metal parts are coated<br><br>11.9 TPY of VOC  |
|   | OAC rule 3745-35-07(B)                                    | 1.4 TPY of VOC from clean-up operations facility-wide<br>less than 10 TPY, as a rolling, 12-month summation, of any individual hazardous air pollutant (HAP) from the entire facility              |
|   | OAC rule 3745-21-09(U)(1)(d)<br>OAC rule 3745-21-07(G)(2) | less than 25 TPY, as a rolling, 12-month summation, of total HAPs from the entire facility<br>See section A.2.a.<br>8 lbs of OC/hr and 40 lbs of OC/day on any day when non-metal parts are coated |

**2. Additional Terms and Conditions**

- (a) 4.3 pounds of VOC per gallon of coating, excluding water and exempt solvents, for a clear coating;  
  
3.5 pounds of VOC per gallon of coating, excluding water and exempt solvents, for an extreme performance coating;  
  
6.2 pounds of VOC per gallon of coating, excluding water and exempt solvents, for a high performance architectural aluminum coating; or  
  
3.0 pounds of VOC per gallon of coating, excluding water and exempt solvents, for any type of coating that is not described above.

The types of coatings described above are defined in OAC rule 3745-21-01.

**B. Operational Restrictions**

1. Filters for particulate emissions shall be maintained in good working order at all times when the booth is in operation.

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

1. The permittee shall collect and record the following information for each day when metal parts are coated:
  - a. The name, identification number, and type (in order to identify the appropriate limit in section A.2.a. of these terms and conditions) of each coating employed for metal parts, as applied.
  - b. The VOC content (excluding water and exempt solvents) and the number of gallons of each coating employed for metal parts, as applied.
  - c. The daily volume-weighted average VOC content of all coatings employed for metal parts, as applied, calculated in accordance with the equation specified in paragraph (B)(9) of OAC rule 3745-21-10.
2. The permittee shall collect and record the following information for each day for the coating operation:
  - a. The company identification for each coating employed.
  - b. The number of gallons of each coating employed.
  - c. The OC/VOC content of each coating, in pounds per gallon.
  - d. The total OC/VOC emission rate for all coatings [i.e., summation of (b) x (c) for each coating employed], in pounds per day.
  - e. The number of hours of operation for the booth.
  - f. What type of material (metal or non-metal) was coated each day the emissions unit was in operation.
  - g. On days when non-metal parts were coated, the average hourly emission OC rate (d / e), in pounds per hour.

[Note: The coating information must be for the coatings as employed, including any thinning solvents added at the emissions unit.]
3. The permittee shall collect and record the following information for each month for the entire facility:
  - a. The company identification for each cleanup material employed.

- b. The number of gallons of each cleanup material employed.
- c. The VOC content of each cleanup material, in pounds per gallon.
- d. The total VOC emission rate for all cleanup materials employed [i.e., summation of (b) x (c) for each coating employed], in pounds per month.
- e. The amount of cleanup material recovered, in pounds.
- f. The total monthly VOC emissions from cleanup operations, calculated as (d) - (e), in pounds.
4. The permittee shall collect and record the following information each month for the facility:
- a. The name and identification number of each coating, as applied.
- b. The individual hazardous air pollutant (HAP)\* content for each HAP of each coating, as applied, as a weight fraction.
- c. The total combined HAP content for each HAP of each coating, as applied, as a weight fraction (sum all the individual HAP contents from b).
- d. The number of gallons of each coating employed.
- e. The density of each coating employed.
- f. The name and identification of each cleanup material employed.
- g. The individual HAP content for each HAP of each cleanup material, as applied, as a weight fraction.
- h. The total combined HAP content of each cleanup material, as applied, as a weight fraction (sum all the individual HAP contents from f).
- i. The number of gallons of each cleanup material employed.
- j. The density of each cleanup material employed.
- k. The total individual HAP emissions 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 [for each HAP the sum of (b) x (d) x (e) for each coating and the sum of (g) x (i) x (j) for each cleanup material].
- l. 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 [the sum of (c) x (d) x (e) for each coating plus the sum of (g) x (i) x (j) for each cleanup material].

\* A listing of the HAPs can be found in Section 112(b) of the Clean Air Act or can be obtained by contacting the Northeast District Office of the Ohio EPA. Material Safety Data Sheets typically include a listing of the solvents contained in the coatings or cleanup materials. This information does not have to be kept on a line-by-line basis.

5. The permit to install for this emissions unit 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: Methyl n-Amyl Ketone  
 Pollutant TLV (mg/m<sup>3</sup>): 233.5  
 Maximum Hourly Emission Rate (lbs/hr): 3.5  
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 101.8  
 MAGLC (ug/m<sup>3</sup>): 5,559.5

Pollutant: Isobutyl Acetate  
 Pollutant TLV (mg/m<sup>3</sup>): 712.6  
 Maximum Hourly Emission Rate (lbs/hr): 0.4  
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 11.6 MAGLC (ug/m<sup>3</sup>): 16,967

Pollutant: Toluene  
 Pollutant TLV (mg/m<sup>3</sup>): 188.0  
 Maximum Hourly Emission Rate (lbs/hr): 0.5  
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 16.1 MAGLC (ug/m<sup>3</sup>): 4,485

Pollutant: Butyl Acetate  
 Pollutant TLV (mg/m<sup>3</sup>): 712.6  
 Maximum Hourly Emission Rate (lbs/hr): 1.6  
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 46.3 MAGLC (ug/m<sup>3</sup>): 16,967

Pollutant: Cyclohexanone  
 Pollutant TLV (mg/m<sup>3</sup>): 96.3  
 Maximum Hourly Emission Rate (lbs/hr): 1.0  
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 30.1 MAGLC (ug/m<sup>3</sup>): 2,292  
 Pollutant: Methyl Ethyl Ketone  
 Pollutant TLV (mg/m<sup>3</sup>): 589.0  
 Maximum Hourly Emission Rate (lbs/hr): 1.8  
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 53.2 MAGLC (ug/m<sup>3</sup>): 14,042

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.).
6. 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 solely due to the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing permit to install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) is (are) defined as a modification under other provisions of the modification definition, then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic 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 quarterly deviation (excursion) reports that identify each day when the daily volume-weighted average coating VOC content exceeds the appropriate limit in section A.2.a of these terms and conditions, when coating metal parts.
2. The permittee shall submit quarterly deviation (excursion) reports that identify each day when non-metal materials were coated and the average daily OC emissions exceeded 8 lbs/hr or 40 pounds and the actual emissions for each such day.
3. The permittee shall submit quarterly deviation (excursion) reports that identify each day when only metal parts were coated and the average daily VOC emissions exceeded 65 pounds and the actual emissions for each such day.
4. The permittee shall submit deviation (excursion) reports that identify each year when the VOC emissions from cleanup materials exceeded 1.4 tons and the actual emissions for each such year.
5. The permittee shall submit deviation (excursion) reports that identify each month when the total HAPs emissions met or exceeded 25 tons per rolling, 12-month period and the actual emissions for each such 12-month period.
6. The permittee shall submit deviation (excursion) reports that identify each month when the emissions of each individual HAP met or exceeded 10 tons per rolling, 12-month period and the actual emissions for each such 12-month period.
7. The permittee shall submit deviation (excursion) reports that identify each year when the VOC emissions exceeded 11.9 tons and the actual emissions for each such year.
8. The quarterly deviation reports shall be submitted in accordance with Section I.A.1.c. of this permit.

E. **Testing Requirements**

1. Compliance with the emission limitations in section A.I. of these terms and conditions shall be determined in accordance with the following method(s):
 

Emission Limitation:  
The appropriate limit from section A.2.a. of these terms and conditions, in lbs of VOC per gallon of coating, excluding water and exempt solvents, as a daily, volume-weighted average, for coatings used to coat metal parts

Applicable Compliance Method:  
Compliance shall be determined based upon the record keeping specified in section C.1. of these terms and conditions.

Emission Limitation:  
8 lbs of OC per hour and 40 lbs of OC per day on any day when non-metal parts are coated

Applicable Compliance Method:  
Compliance shall be determined based upon the record keeping specified in section C.2. of these terms and conditions.

Emission Limitation:  
65 lbs of VOC per day on any day only metal parts are coated

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping specified in section C.2. of these terms and conditions.

Emission Limitation:

11.9 tons VOC per year from the coating operations

Applicable Compliance Method:

Compliance shall be determined by summing the daily emissions determined from the record keeping specified in section C.2. of these terms and conditions.

Emission Limitation:

1.4 tons VOC per year for cleanup operations facility-wide

Applicable Compliance Method:

Compliance shall be determined based upon the record keeping specified in section C.3. of these terms and conditions.

Emission Limitations:

less than 10 TPY, as a rolling, 12-month summation, of any individual HAP from the entire facility

less than 25 TPY, as a rolling, 12-month summation, of total HAPs from the entire facility

Applicable Compliance Method:

Compliance shall be determined based upon the record keeping specified in section C.4. of these terms and conditions.

F. **Miscellaneous Requirements**

1. None

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

Facility ID: 0285000381 Emissions Unit ID: R003 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>   |
|---|---|--|
| spray booth #3 with dry filter                | OAC rule 3745-31-05(A)(3)<br>(PTI 02-16207)               | 65 lbs of volatile organic compounds (VOC) per day on any day when only metal parts are coated   |
|   |   | 11.9 TPY of VOC  |
|   | OAC rule 3745-35-07(B)                                    | 1.4 TPY of VOC from clean-up operations facility-wide<br>less than 10 TPY, as a rolling, 12-month summation, of any individual hazardous air pollutant (HAP) from the entire facility              |
|   | OAC rule 3745-21-09(U)(1)(d)<br>OAC rule 3745-21-07(G)(2) | less than 25 TPY, as a rolling, 12-month summation, of total HAPs from the entire facility<br>See section A.2.a.<br>8 lbs of OC/hr and 40 lbs of OC/day on any day when non-metal parts are coated |

2. **Additional Terms and Conditions**

- (a) 4.3 pounds of VOC per gallon of coating, excluding water and exempt solvents, for a clear coating;
- 3.5 pounds of VOC per gallon of coating, excluding water and

exempt solvents, for an extreme performance coating;

6.2 pounds of VOC per gallon of coating, excluding water and exempt solvents, for a high performance architectural aluminum coating; or

3.0 pounds of VOC per gallon of coating, excluding water and exempt solvents, for any type of coating that is not described above.

The types of coatings described above are defined in OAC rule 3745-21-01.

**B. Operational Restrictions**

1. Filters for particulate emissions shall be maintained in good working order at all times when the booth is in operation.

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

1. The permittee shall collect and record the following information for each day when metal parts are coated:
  - a. The name, identification number, and type (in order to identify the appropriate limit in section A.2.a. of these terms and conditions) of each coating employed for metal parts, as applied.
  - b. The VOC content (excluding water and exempt solvents) and the number of gallons of each coating employed for metal parts, as applied.
  - c. The daily volume-weighted average VOC content of all coatings employed for metal parts, as applied, calculated in accordance with the equation specified in paragraph (B)(9) of OAC rule 3745-21-10.
2. The permittee shall collect and record the following information for each day for the coating operation:
  - a. The company identification for each coating employed.
  - b. The number of gallons of each coating employed.
  - c. The OC/VOC content of each coating, in pounds per gallon.
  - d. The total OC/VOC emission rate for all coatings [i.e., summation of (b) x (c) for each coating employed], in pounds per day.
  - e. The number of hours of operation for the booth.
  - f. What type of material (metal or non-metal) was coated each day the emissions unit was in operation.
  - g. On days when non-metal parts were coated, the average hourly emission OC rate (d / e), in pounds per hour.  
[Note: The coating information must be for the coatings as employed, including any thinning solvents added at the emissions unit.]
3. The permittee shall collect and record the following information for each month for the entire facility:
  - a. The company identification for each cleanup material employed.
  - b. The number of gallons of each cleanup material employed.
  - c. The VOC content of each cleanup material, in pounds per gallon.
  - d. The total VOC emission rate for all cleanup materials employed [i.e., summation of (b) x (c) for each coating employed], in pounds per month.
  - e. The amount of cleanup material recovered, in pounds.
  - f. The total monthly VOC emissions from cleanup operations, calculated as (d) - (e), in pounds.
4. The permittee shall collect and record the following information each month for the facility:
  - a. The name and identification number of each coating, as applied.
  - b. The individual hazardous air pollutant (HAP)\* content for each HAP of each coating, as applied, as a weight fraction.
  - c. The total combined HAP content for each HAP of each coating, as applied, as a weight fraction (sum all the individual HAP contents from b).
  - d. The number of gallons of each coating employed.
  - e. The density of each coating employed.
  - f. The name and identification of each cleanup material employed.
  - g. The individual HAP content for each HAP of each cleanup material, as applied, as a weight fraction.
  - h. The total combined HAP content of each cleanup material, as applied, as a weight fraction (sum all the individual HAP contents from f).
  - i. The number of gallons of each cleanup material employed.
  - j. The density of each cleanup material employed.

k. The total individual HAP emissions 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 [for each HAP the sum of (b) x (d) x (e) for each coating and the sum of (g) x (i) x (j) for each cleanup material].

l. 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 [the sum of (c) x (d) x (e) for each coating plus the sum of (g) x (i) x (j) for each cleanup material].

\* A listing of the HAPs can be found in Section 112(b) of the Clean Air Act or can be obtained by contacting the Northeast District Office of the Ohio EPA. Material Safety Data Sheets typically include a listing of the solvents contained in the coatings or cleanup materials. This information does not have to be kept on a line-by-line basis.

5. The permit to install for this emissions unit 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: Methyl n-Amyl Ketone  
 Pollutant TLV (mg/m3): 233.5  
 Maximum Hourly Emission Rate (lbs/hr): 3.5  
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 101.8  
 MAGLC (ug/m3): 5,559.5

Pollutant: Isobutyl Acetate  
 Pollutant TLV (mg/m3): 712.6  
 Maximum Hourly Emission Rate (lbs/hr): 0.4  
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 11.6 MAGLC (ug/m3): 16,967

Pollutant: Toluene  
 Pollutant TLV (mg/m3): 188.0  
 Maximum Hourly Emission Rate (lbs/hr): 0.5  
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 16.1 MAGLC (ug/m3): 4,485

Pollutant: Butyl Acetate  
 Pollutant TLV (mg/m3): 712.6  
 Maximum Hourly Emission Rate (lbs/hr): 1.6  
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 46.3 MAGLC (ug/m3): 16,967

Pollutant: Cyclohexanone  
 Pollutant TLV (mg/m3): 96.3  
 Maximum Hourly Emission Rate (lbs/hr): 1.0  
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 30.1 MAGLC (ug/m3): 2,292

Pollutant: Methyl Ethyl Ketone  
 Pollutant TLV (mg/m3): 589.0  
 Maximum Hourly Emission Rate (lbs/hr): 1.8  
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 53.2 MAGLC (ug/m3): 14,042

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.).
6. 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 solely due to the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing permit to install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) is (are) defined as a modification under other provisions of the modification definition, then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic 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 quarterly deviation (excursion) reports that identify each day when the daily volume-weighted average coating VOC content exceeds the appropriate limit in section A.2.a of these terms and conditions, when coating metal parts.
2. The permittee shall submit quarterly deviation (excursion) reports that identify each day when non-metal materials were coated and the average daily OC emissions exceeded 8 lbs/hr or 40 pounds and the actual emissions for each such day.
3. The permittee shall submit quarterly deviation (excursion) reports that identify each day when only metal parts were coated and the average daily VOC emissions exceeded 65 pounds and the actual emissions for each such day.
4. The permittee shall submit deviation (excursion) reports that identify each year when the VOC emissions from cleanup materials exceeded 1.4 tons and the actual emissions for each such year.
5. The permittee shall submit deviation (excursion) reports that identify each month when the total HAPs emissions met or exceeded 25 tons per rolling, 12-month period and the actual emissions for each such 12-month period.
6. The permittee shall submit deviation (excursion) reports that identify each month when the emissions of each individual HAP met or exceeded 10 tons per rolling, 12-month period and the actual emissions for each such 12-month period.
7. The permittee shall submit deviation (excursion) reports that identify each year when the VOC emissions exceeded 11.9 tons and the actual emissions for each such year.
8. The quarterly deviation reports shall be submitted in accordance with Section I.A.1.c. of this permit.

**E. Testing Requirements**

1. Compliance with the emission limitations in section A.I. of these terms and conditions shall be determined in accordance with the following method(s):
 

Emission Limitation:  
The appropriate limit from section A.2.a. of these terms and conditions, in lbs of VOC per gallon of coating, excluding water and exempt solvents, as a daily, volume-weighted average, for coatings used to coat metal parts

Applicable Compliance Method:  
Compliance shall be determined based upon the record keeping specified in section C.1. of these terms and conditions.

Emission Limitation:  
8 lbs of OC per hour and 40 lbs of OC per day on any day when non-metal parts are coated

Applicable Compliance Method:  
Compliance shall be determined based upon the record keeping specified in section C.2. of these terms and conditions.

Emission Limitation:  
65 lbs of VOC per day on any day only metal parts are coated

Applicable Compliance Method:  
Compliance shall be demonstrated based upon the record keeping specified in section C.2. of these terms and conditions.

Emission Limitation:  
11.9 tons VOC per year from the coating operations

Applicable Compliance Method:  
Compliance shall be determined by summing the daily emissions determined from the record keeping specified in section C.2. of these terms and conditions.

Emission Limitation:  
1.4 tons VOC per year for cleanup operations facility-wide

Applicable Compliance Method:  
Compliance shall be determined based upon the record keeping specified in section C.3. of these terms and conditions.

Emission Limitations:  
less than 10 TPY, as a rolling, 12-month summation, of any individual HAP from the entire facility

less than 25 TPY, as a rolling, 12-month summation, of total HAPs from the entire facility

Applicable Compliance Method:  
Compliance shall be determined based upon the record keeping specified in section C.4. of these terms and conditions.

**F. Miscellaneous Requirements**

1. None

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

Facility ID: 0285000381 Emissions Unit ID: R004 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>   |
|---|---|--|
| spray booth #4 with dry filter                | OAC rule 3745-31-05(A)(3)<br>(PTI 02-16207)               | 65 lbs of volatile organic compounds (VOC) per day on any day when only metal parts are coated<br><br>11.9 TPY of VOC  |
|   | OAC rule 3745-35-07(B)                                    | 1.4 TPY of VOC from clean-up operations facility-wide<br>less than 10 TPY, as a rolling, 12-month summation, of any individual hazardous air pollutant (HAP) from the entire facility              |
|   | OAC rule 3745-21-09(U)(1)(d)<br>OAC rule 3745-21-07(G)(2) | less than 25 TPY, as a rolling, 12-month summation, of total HAPs from the entire facility<br>See section A.2.a.<br>8 lbs of OC/hr and 40 lbs of OC/day on any day when non-metal parts are coated |

**2. Additional Terms and Conditions**

- (a) 4.3 pounds of VOC per gallon of coating, excluding water and exempt solvents, for a clear coating;
- 3.5 pounds of VOC per gallon of coating, excluding water and exempt solvents, for an extreme performance coating;
- 6.2 pounds of VOC per gallon of coating, excluding water and exempt solvents, for a high performance architectural aluminum coating; or
- 3.0 pounds of VOC per gallon of coating, excluding water and exempt solvents, for any type of coating that is not described above.

The types of coatings described above are defined in OAC rule 3745-21-01.

**B. Operational Restrictions**

1. Filters for particulate emissions shall be maintained in good working order at all times when the booth is in operation.

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

1. The permittee shall collect and record the following information for each day when metal parts are coated:
  - a. The name, identification number, and type (in order to identify the appropriate limit in section A.2.a. of these terms and conditions) of each coating employed for metal parts, as applied.
  - b. The VOC content (excluding water and exempt solvents) and the number of gallons of each coating employed for metal parts, as applied.
  - c. The daily volume-weighted average VOC content of all coatings employed for metal parts, as applied, calculated in accordance with the equation specified in paragraph (B)(9) of OAC rule 3745-21-10.
2. The permittee shall collect and record the following information for each day for the coating operation:
  - a. The company identification for each coating employed.
  - b. The number of gallons of each coating employed.
  - c. The OC/VOC content of each coating, in pounds per gallon.

- d. The total OC/VOC emission rate for all coatings [i.e., summation of (b) x (c) for each coating employed], in pounds per day.
- e. The number of hours of operation for the booth.
- f. What type of material (metal or non-metal) was coated each day the emissions unit was in operation.
- g. On days when non-metal parts were coated, the average hourly emission OC rate (d / e), in pounds per hour.
- [Note: The coating information must be for the coatings as employed, including any thinning solvents added at the emissions unit.]
3. The permittee shall collect and record the following information for each month for the entire facility:
- a. The company identification for each cleanup material employed.
- b. The number of gallons of each cleanup material employed.
- c. The VOC content of each cleanup material, in pounds per gallon.
- d. The total VOC emission rate for all cleanup materials employed [i.e., summation of (b) x (c) for each coating employed], in pounds per month.
- e. The amount of cleanup material recovered, in pounds.
- f. The total monthly VOC emissions from cleanup operations, calculated as (d) - (e), in pounds.
4. The permittee shall collect and record the following information each month for the facility:
- a. The name and identification number of each coating, as applied.
- b. The individual hazardous air pollutant (HAP)\* content for each HAP of each coating, as applied, as a weight fraction.
- c. The total combined HAP content for each HAP of each coating, as applied, as a weight fraction (sum all the individual HAP contents from b).
- d. The number of gallons of each coating employed.
- e. The density of each coating employed.
- f. The name and identification of each cleanup material employed.
- g. The individual HAP content for each HAP of each cleanup material, as applied, as a weight fraction.
- h. The total combined HAP content of each cleanup material, as applied, as a weight fraction (sum all the individual HAP contents from f).
- i. The number of gallons of each cleanup material employed.
- j. The density of each cleanup material employed.
- k. The total individual HAP emissions 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 [for each HAP the sum of (b) x (d) x (e) for each coating and the sum of (g) x (i) x (j) for each cleanup material].
- l. 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 [the sum of (c) x (d) x (e) for each coating plus the sum of (g) x (i) x (j) for each cleanup material].
- \* A listing of the HAPs can be found in Section 112(b) of the Clean Air Act or can be obtained by contacting the Northeast District Office of the Ohio EPA. Material Safety Data Sheets typically include a listing of the solvents contained in the coatings or cleanup materials. This information does not have to be kept on a line-by-line basis.
5. The permit to install for this emissions unit 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: Methyl n-Amyl Ketone  
 Pollutant TLV (mg/m3): 233.5  
 Maximum Hourly Emission Rate (lbs/hr): 3.5  
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 101.8  
 MAGLC (ug/m3): 5,559.5
- Pollutant: Isobutyl Acetate  
 Pollutant TLV (mg/m3): 712.6  
 Maximum Hourly Emission Rate (lbs/hr): 0.4  
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 11.6 MAGLC (ug/m3): 16,967
- Pollutant: Toluene  
 Pollutant TLV (mg/m3): 188.0

Maximum Hourly Emission Rate (lbs/hr): 0.5  
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 16.1 MAGLC (ug/m3): 4,485

Pollutant: Butyl Acetate  
 Pollutant TLV (mg/m3): 712.6  
 Maximum Hourly Emission Rate (lbs/hr): 1.6  
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 46.3 MAGLC (ug/m3): 16,967

Pollutant: Cyclohexanone  
 Pollutant TLV (mg/m3): 96.3  
 Maximum Hourly Emission Rate (lbs/hr): 1.0  
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 30.1 MAGLC (ug/m3): 2,292  
 Pollutant: Methyl Ethyl Ketone  
 Pollutant TLV (mg/m3): 589.0  
 Maximum Hourly Emission Rate (lbs/hr): 1.8  
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 53.2 MAGLC (ug/m3): 14,042

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.).
6. 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 solely due to the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing permit to install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) is (are) defined as a modification under other provisions of the modification definition, then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic 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 quarterly deviation (excursion) reports that identify each day when the daily volume-weighted average coating VOC content exceeds the appropriate limit in section A.2.a of these terms and conditions, when coating metal parts.
  2. The permittee shall submit quarterly deviation (excursion) reports that identify each day when non-metal materials were coated and the average daily OC emissions exceeded 8 lbs/hr or 40 pounds and the actual emissions for each such day.
  3. The permittee shall submit quarterly deviation (excursion) reports that identify each day when only metal parts were coated and the average daily VOC emissions exceeded 65 pounds and the actual emissions for each such day.
  4. The permittee shall submit deviation (excursion) reports that identify each year when the VOC emissions from cleanup materials exceeded 1.4 tons and the actual emissions for each such year.
  5. The permittee shall submit deviation (excursion) reports that identify each month when the total HAPs emissions met or exceeded 25 tons per rolling, 12-month period and the actual emissions for each such 12-month period.
  6. The permittee shall submit deviation (excursion) reports that identify each month when the emissions of each individual HAP met or exceeded 10 tons per rolling, 12-month period and the actual emissions for each such 12-month period.
  7. The permittee shall submit deviation (excursion) reports that identify each year when the VOC emissions exceeded 11.9 tons and the actual emissions for each such year.
  8. The quarterly deviation reports shall be submitted in accordance with Section I.A.1.c. of this permit.

**E. Testing Requirements**

1. Compliance with the emission limitations in section A.I. of these terms and conditions shall be determined in accordance with the following method(s):  
 Emission Limitation:

The appropriate limit from section A.2.a. of these terms and conditions, in lbs of VOC per gallon of coating, excluding water and exempt solvents, as a daily, volume-weighted average, for coatings used to coat metal parts

Applicable Compliance Method:  
 Compliance shall be determined based upon the record keeping specified in section C.1. of these terms and conditions.  
 Emission Limitation:  
 8 lbs of OC per hour and 40 lbs of OC per day on any day when non-metal parts are coated

Applicable Compliance Method:  
 Compliance shall be determined based upon the record keeping specified in section C.2. of these terms and conditions.  
 Emission Limitation:  
 65 lbs of VOC per day on any day only metal parts are coated

Applicable Compliance Method:  
 Compliance shall be demonstrated based upon the record keeping specified in section C.2. of these terms and conditions.  
 Emission Limitation:  
 11.9 tons VOC per year from the coating operations

Applicable Compliance Method:  
 Compliance shall be determined by summing the daily emissions determined from the record keeping specified in section C.2. of these terms and conditions.  
 Emission Limitation:  
 1.4 tons VOC per year for cleanup operations facility-wide

Applicable Compliance Method:  
 Compliance shall be determined based upon the record keeping specified in section C.3. of these terms and conditions.  
 Emission Limitations:  
 less than 10 TPY, as a rolling, 12-month summation, of any individual HAP from the entire facility  
  
 less than 25 TPY, as a rolling, 12-month summation, of total HAPs from the entire facility

Applicable Compliance Method:  
 Compliance shall be determined based upon the record keeping specified in section C.4. of these terms and conditions.

**F. Miscellaneous Requirements**

1. None

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

Facility ID: 0285000381 Emissions Unit ID: R005 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>  |
|---|---|---|
| spray booth #5 with dry filter                | OAC rule 3745-31-05(A)(3)<br>(PTI 02-16207) | 65 lbs of volatile organic compounds (VOC) per day on any day when only metal parts are coated<br><br>11.9 TPY of VOC |
|   | OAC rule 3745-35-07(B)                      | 1.4 TPY of VOC from clean-up operations facility-wide<br>less than 10 TPY, as a rolling, 12-month summation,          |

of any individual hazardous air pollutant (HAP) from the entire facility

less than 25 TPY, as a rolling, 12-month summation, of total HAPs from the entire facility

See section A.2.a.

8 lbs of OC/hr and 40 lbs of OC/day on any day when non-metal parts are coated

OAC rule 3745-21-09(U)(1)(d)

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

**2. Additional Terms and Conditions**

- (a) 4.3 pounds of VOC per gallon of coating, excluding water and exempt solvents, for a clear coating;
- 3.5 pounds of VOC per gallon of coating, excluding water and exempt solvents, for an extreme performance coating;
- 6.2 pounds of VOC per gallon of coating, excluding water and exempt solvents, for a high performance architectural aluminum coating; or
- 3.0 pounds of VOC per gallon of coating, excluding water and exempt solvents, for any type of coating that is not described above.

The types of coatings described above are defined in OAC rule 3745-21-01.

**B. Operational Restrictions**

1. Filters for particulate emissions shall be maintained in good working order at all times when the booth is in operation.

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

1. The permittee shall collect and record the following information for each day when metal parts are coated:
- The name, identification number, and type (in order to identify the appropriate limit in section A.2.a. of these terms and conditions) of each coating employed for metal parts, as applied.
  - The VOC content (excluding water and exempt solvents) and the number of gallons of each coating employed for metal parts, as applied.
  - The daily volume-weighted average VOC content of all coatings employed for metal parts, as applied, calculated in accordance with the equation specified in paragraph (B)(9) of OAC rule 3745-21-10.
2. The permittee shall collect and record the following information for each day for the coating operation:
- The company identification for each coating employed.
  - The number of gallons of each coating employed.
  - The OC/VOC content of each coating, in pounds per gallon.
  - The total OC/VOC emission rate for all coatings [i.e., summation of (b) x (c) for each coating employed], in pounds per day.
  - The number of hours of operation for the booth.
  - What type of material (metal or non-metal) was coated each day the emissions unit was in operation.
  - On days when non-metal parts were coated, the average hourly emission OC rate (d / e), in pounds per hour.
- [Note: The coating information must be for the coatings as employed, including any thinning solvents added at the emissions unit.]
3. The permittee shall collect and record the following information for each month for the entire facility:
- The company identification for each cleanup material employed.
  - The number of gallons of each cleanup material employed.
  - The VOC content of each cleanup material, in pounds per gallon.
  - The total VOC emission rate for all cleanup materials employed [i.e., summation of (b) x (c) for each coating employed], in pounds per month.
  - The amount of cleanup material recovered, in pounds.
  - The total monthly VOC emissions from cleanup operations, calculated as (d) - (e), in pounds.
4. The permittee shall collect and record the following information each month for the facility:
- The name and identification number of each coating, as applied.
  - The individual hazardous air pollutant (HAP)\* content for each HAP of each coating, as applied, as a weight fraction.
  - The total combined HAP content for each HAP of each coating, as applied, as a weight fraction (sum all the

individual HAP contents from b).

- d. The number of gallons of each coating employed.
- e. The density of each coating employed.
- f. The name and identification of each cleanup material employed.
- g. The individual HAP content for each HAP of each cleanup material, as applied, as a weight fraction.
- h. The total combined HAP content of each cleanup material, as applied, as a weight fraction (sum all the individual HAP contents from f).
- i. The number of gallons of each cleanup material employed.
- j. The density of each cleanup material employed.
- k. The total individual HAP emissions 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 [for each HAP the sum of (b) x (d) x (e) for each coating and the sum of (g) x (i) x (j) for each cleanup material].
- l. 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 [the sum of (c) x (d) x (e) for each coating plus the sum of (g) x (i) x (j) for each cleanup material].

\* A listing of the HAPs can be found in Section 112(b) of the Clean Air Act or can be obtained by contacting the Northeast District Office of the Ohio EPA. Material Safety Data Sheets typically include a listing of the solvents contained in the coatings or cleanup materials. This information does not have to be kept on a line-by-line basis.

5. The permit to install for this emissions unit 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: Methyl n-Amyl Ketone  
 Pollutant TLV (mg/m3): 233.5  
 Maximum Hourly Emission Rate (lbs/hr): 3.5  
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 101.8  
 MAGLC (ug/m3): 5,559.5

Pollutant: Isobutyl Acetate  
 Pollutant TLV (mg/m3): 712.6  
 Maximum Hourly Emission Rate (lbs/hr): 0.4  
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 11.6 MAGLC (ug/m3): 16,967

Pollutant: Toluene  
 Pollutant TLV (mg/m3): 188.0  
 Maximum Hourly Emission Rate (lbs/hr): 0.5  
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 16.1 MAGLC (ug/m3): 4,485

Pollutant: Butyl Acetate  
 Pollutant TLV (mg/m3): 712.6  
 Maximum Hourly Emission Rate (lbs/hr): 1.6  
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 46.3 MAGLC (ug/m3): 16,967

Pollutant: Cyclohexanone  
 Pollutant TLV (mg/m3): 96.3  
 Maximum Hourly Emission Rate (lbs/hr): 1.0  
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 30.1 MAGLC (ug/m3): 2,292

Pollutant: Methyl Ethyl Ketone  
 Pollutant TLV (mg/m3): 589.0  
 Maximum Hourly Emission Rate (lbs/hr): 1.8  
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 53.2 MAGLC (ug/m3): 14,042

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.).

6. 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 solely due to the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing permit to install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) is (are) defined as a modification under other provisions of the modification definition, then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic 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 quarterly deviation (excursion) reports that identify each day when the daily volume-weighted average coating VOC content exceeds the appropriate limit in section A.2.a of these terms and conditions, when coating metal parts.
2. The permittee shall submit quarterly deviation (excursion) reports that identify each day when non-metal materials were coated and the average daily OC emissions exceeded 8 lbs/hr or 40 pounds and the actual emissions for each such day.
3. The permittee shall submit quarterly deviation (excursion) reports that identify each day when only metal parts were coated and the average daily VOC emissions exceeded 65 pounds and the actual emissions for each such day.
4. The permittee shall submit deviation (excursion) reports that identify each year when the VOC emissions from cleanup materials exceeded 1.4 tons and the actual emissions for each such year.
5. The permittee shall submit deviation (excursion) reports that identify each month when the total HAPs emissions met or exceeded 25 tons per rolling, 12-month period and the actual emissions for each such 12-month period.
6. The permittee shall submit deviation (excursion) reports that identify each month when the emissions of each individual HAP met or exceeded 10 tons per rolling, 12-month period and the actual emissions for each such 12-month period.
7. The permittee shall submit deviation (excursion) reports that identify each year when the VOC emissions exceeded 11.9 tons and the actual emissions for each such year.
8. The quarterly deviation reports shall be submitted in accordance with Section I.A.1.c. of this permit.

**E. Testing Requirements**

1. Compliance with the emission limitations in section A.I. of these terms and conditions shall be determined in accordance with the following method(s):
 

Emission Limitation:  
The appropriate limit from section A.2.a. of these terms and conditions, in lbs of VOC per gallon of coating, excluding water and exempt solvents, as a daily, volume-weighted average, for coatings used to coat metal parts

Applicable Compliance Method:  
Compliance shall be determined based upon the record keeping specified in section C.1. of these terms and conditions.  
Emission Limitation:  
8 lbs of OC per hour and 40 lbs of OC per day on any day when non-metal parts are coated

Applicable Compliance Method:  
Compliance shall be determined based upon the record keeping specified in section C.2. of these terms and conditions.  
Emission Limitation:  
65 lbs of VOC per day on any day only metal parts are coated

Applicable Compliance Method:  
Compliance shall be demonstrated based upon the record keeping specified in section C.2. of these terms and conditions.  
Emission Limitation:  
11.9 tons VOC per year from the coating operations

Applicable Compliance Method:  
Compliance shall be determined by summing the daily emissions determined from the record keeping specified in section C.2. of these terms and conditions.  
Emission Limitation:  
1.4 tons VOC per year for cleanup operations facility-wide

Applicable Compliance Method:  
Compliance shall be determined based upon the record keeping specified in section C.3. of these terms and conditions.  
Emission Limitations:  
less than 10 TPY, as a rolling, 12-month summation, of any individual HAP from the entire facility  
less than 25 TPY, as a rolling, 12-month summation, of total HAPs from the entire facility

Applicable Compliance Method:  
 Compliance shall be determined based upon the record keeping specified in section C.4. of these terms and conditions.

**F. Miscellaneous Requirements**

- 1. None

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

**Facility ID: 0285000381 Emissions Unit ID: R006 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>   |
|---|---|--|
| spray booth #6 with dry filter                | OAC rule 3745-31-05(A)(3)<br>(PTI 02-16207)               | 65 lbs of volatile organic compounds (VOC) per day on any day when only metal parts are coated   |
|   |   | 11.9 TPY of VOC  |
|   | OAC rule 3745-35-07(B)                                    | 1.4 TPY of VOC from clean-up operations facility-wide<br>less than 10 TPY, as a rolling, 12-month summation, of any individual hazardous air pollutant (HAP) from the entire facility              |
|   | OAC rule 3745-21-09(U)(1)(d)<br>OAC rule 3745-21-07(G)(2) | less than 25 TPY, as a rolling, 12-month summation, of total HAPs from the entire facility<br>See section A.2.a.<br>8 lbs of OC/hr and 40 lbs of OC/day on any day when non-metal parts are coated |

- 2. **Additional Terms and Conditions**
  - (a) 4.3 pounds of VOC per gallon of coating, excluding water and exempt solvents, for a clear coating;
  - 3.5 pounds of VOC per gallon of coating, excluding water and exempt solvents, for an extreme performance coating;
  - 6.2 pounds of VOC per gallon of coating, excluding water and exempt solvents, for a high performance architectural aluminum coating; or
  - 3.0 pounds of VOC per gallon of coating, excluding water and exempt solvents, for any type of coating that is not described above.

The types of coatings described above are defined in OAC rule 3745-21-01.

**B. Operational Restrictions**

- 1. Filters for particulate emissions shall be maintained in good working order at all times when the booth is in operation.

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

- 1. The permittee shall collect and record the following information for each day when metal parts are coated:

- a. The name, identification number, and type (in order to identify the appropriate limit in section A.2.a. of these terms and conditions) of each coating employed for metal parts, as applied.
  - b. The VOC content (excluding water and exempt solvents) and the number of gallons of each coating employed for metal parts, as applied.
  - c. The daily volume-weighted average VOC content of all coatings employed for metal parts, as applied, calculated in accordance with the equation specified in paragraph (B)(9) of OAC rule 3745-21-10.
2. The permittee shall collect and record the following information for each day for the coating operation:
  - a. The company identification for each coating employed.
  - b. The number of gallons of each coating employed.
  - c. The OC/VOC content of each coating, in pounds per gallon.
  - d. The total OC/VOC emission rate for all coatings [i.e., summation of (b) x (c) for each coating employed], in pounds per day.
  - e. The number of hours of operation for the booth.
  - f. What type of material (metal or non-metal) was coated each day the emissions unit was in operation.
  - g. On days when non-metal parts were coated, the average hourly emission OC rate (d / e), in pounds per hour.  
[Note: The coating information must be for the coatings as employed, including any thinning solvents added at the emissions unit.]
3. The permittee shall collect and record the following information for each month for the entire facility:
  - a. The company identification for each cleanup material employed.
  - b. The number of gallons of each cleanup material employed.
  - c. The VOC content of each cleanup material, in pounds per gallon.
  - d. The total VOC emission rate for all cleanup materials employed [i.e., summation of (b) x (c) for each coating employed], in pounds per month.
  - e. The amount of cleanup material recovered, in pounds.
  - f. The total monthly VOC emissions from cleanup operations, calculated as (d) - (e), in pounds.
4. The permittee shall collect and record the following information each month for the facility:
  - a. The name and identification number of each coating, as applied.
  - b. The individual hazardous air pollutant (HAP)\* content for each HAP of each coating, as applied, as a weight fraction.
  - c. The total combined HAP content for each HAP of each coating, as applied, as a weight fraction (sum all the individual HAP contents from b).
  - d. The number of gallons of each coating employed.
  - e. The density of each coating employed.
  - f. The name and identification of each cleanup material employed.
  - g. The individual HAP content for each HAP of each cleanup material, as applied, as a weight fraction.
  - h. The total combined HAP content of each cleanup material, as applied, as a weight fraction (sum all the individual HAP contents from f).
  - i. The number of gallons of each cleanup material employed.
  - j. The density of each cleanup material employed.
  - k. The total individual HAP emissions 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 [for each HAP the sum of (b) x (d) x (e) for each coating and the sum of (g) x (i) x (j) for each cleanup material].
  - l. 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 [the sum of (c) x (d) x (e) for each coating plus the sum of (g) x (i) x (j) for each cleanup material].

\* A listing of the HAPs can be found in Section 112(b) of the Clean Air Act or can be obtained by contacting the Northeast District Office of the Ohio EPA. Material Safety Data Sheets typically include a listing of the solvents contained in the coatings or cleanup materials. This information does not have to be kept on a line-by-line basis.
5. The permit to install for this emissions unit 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: Methyl n-Amyl Ketone  
 Pollutant TLV (mg/m3): 233.5  
 Maximum Hourly Emission Rate (lbs/hr): 3.5  
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 101.8  
 MAGLC (ug/m3): 5,559.5

Pollutant: Isobutyl Acetate  
 Pollutant TLV (mg/m3): 712.6  
 Maximum Hourly Emission Rate (lbs/hr): 0.4  
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 11.6 MAGLC (ug/m3): 16,967

Pollutant: Toluene  
 Pollutant TLV (mg/m3): 188.0  
 Maximum Hourly Emission Rate (lbs/hr): 0.5  
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 16.1 MAGLC (ug/m3): 4,485

Pollutant: Butyl Acetate  
 Pollutant TLV (mg/m3): 712.6  
 Maximum Hourly Emission Rate (lbs/hr): 1.6  
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 46.3 MAGLC (ug/m3): 16,967

Pollutant: Cyclohexanone  
 Pollutant TLV (mg/m3): 96.3  
 Maximum Hourly Emission Rate (lbs/hr): 1.0  
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 30.1 MAGLC (ug/m3): 2,292  
 Pollutant: Methyl Ethyl Ketone  
 Pollutant TLV (mg/m3): 589.0  
 Maximum Hourly Emission Rate (lbs/hr): 1.8  
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 53.2 MAGLC (ug/m3): 14,042

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.).
6. 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 solely due to the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing permit to install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) is (are) defined as a modification under other provisions of the modification definition, then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic 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 quarterly deviation (excursion) reports that identify each day when the daily volume-weighted average coating VOC content exceeds the appropriate limit in section A.2.a of these terms and conditions, when coating metal parts.
  2. The permittee shall submit quarterly deviation (excursion) reports that identify each day when non-metal materials were coated and the average daily OC emissions exceeded 8 lbs/hr or 40 pounds and the actual emissions for each such day.
  3. The permittee shall submit quarterly deviation (excursion) reports that identify each day when only metal parts were coated and the average daily VOC emissions exceeded 65 pounds and the actual emissions for each such day.
  4. The permittee shall submit deviation (excursion) reports that identify each year when the VOC emissions from cleanup materials exceeded 1.4 tons and the actual emissions for each such year.

5. The permittee shall submit deviation (excursion) reports that identify each month when the total HAPs emissions met or exceeded 25 tons per rolling, 12-month period and the actual emissions for each such 12-month period.
6. The permittee shall submit deviation (excursion) reports that identify each month when the emissions of each individual HAP met or exceeded 10 tons per rolling, 12-month period and the actual emissions for each such 12-month period.
7. The permittee shall submit deviation (excursion) reports that identify each year when the VOC emissions exceeded 11.9 tons and the actual emissions for each such year.
8. The quarterly deviation reports shall be submitted in accordance with Section I.A.1.c. of this permit.

**E. Testing Requirements**

1. Compliance with the emission limitations in section A.I. of these terms and conditions shall be determined in accordance with the following method(s):
 

Emission Limitation:  
The appropriate limit from section A.2.a. of these terms and conditions, in lbs of VOC per gallon of coating, excluding water and exempt solvents, as a daily, volume-weighted average, for coatings used to coat metal parts

Applicable Compliance Method:  
Compliance shall be determined based upon the record keeping specified in section C.1. of these terms and conditions.

Emission Limitation:  
8 lbs of OC per hour and 40 lbs of OC per day on any day when non-metal parts are coated

Applicable Compliance Method:  
Compliance shall be determined based upon the record keeping specified in section C.2. of these terms and conditions.

Emission Limitation:  
65 lbs of VOC per day on any day only metal parts are coated

Applicable Compliance Method:  
Compliance shall be demonstrated based upon the record keeping specified in section C.2. of these terms and conditions.

Emission Limitation:  
11.9 tons VOC per year from the coating operations

Applicable Compliance Method:  
Compliance shall be determined by summing the daily emissions determined from the record keeping specified in section C.2. of these terms and conditions.

Emission Limitation:  
1.4 tons VOC per year for cleanup operations facility-wide

Applicable Compliance Method:  
Compliance shall be determined based upon the record keeping specified in section C.3. of these terms and conditions.

Emission Limitations:  
less than 10 TPY, as a rolling, 12-month summation, of any individual HAP from the entire facility  
less than 25 TPY, as a rolling, 12-month summation, of total HAPs from the entire facility

Applicable Compliance Method:  
Compliance shall be determined based upon the record keeping specified in section C.4. of these terms and conditions.

**F. Miscellaneous Requirements**

1. None

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

Facility ID: 0285000381 Emissions Unit ID: R007 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>   |
|---|---|--|
| spray booth #7 with dry filter                | OAC rule 3745-31-05(A)(3)<br>(PTI 02-16207)               | 65 lbs of volatile organic compounds (VOC) per day on any day when only metal parts are coated   |
|   |   | 11.9 TPY of VOC  |
|   | OAC rule 3745-35-07(B)                                    | 1.4 TPY of VOC from clean-up operations facility-wide<br>less than 10 TPY, as a rolling, 12-month summation, of any individual hazardous air pollutant (HAP) from the entire facility              |
|   | OAC rule 3745-21-09(U)(1)(d)<br>OAC rule 3745-21-07(G)(2) | less than 25 TPY, as a rolling, 12-month summation, of total HAPs from the entire facility<br>See section A.2.a.<br>8 lbs of OC/hr and 40 lbs of OC/day on any day when non-metal parts are coated |

2. **Additional Terms and Conditions**

- (a) 4.3 pounds of VOC per gallon of coating, excluding water and exempt solvents, for a clear coating;
- 3.5 pounds of VOC per gallon of coating, excluding water and exempt solvents, for an extreme performance coating;
- 6.2 pounds of VOC per gallon of coating, excluding water and exempt solvents, for a high performance architectural aluminum coating; or
- 3.0 pounds of VOC per gallon of coating, excluding water and exempt solvents, for any type of coating that is not described above.

The types of coatings described above are defined in OAC rule 3745-21-01.

B. **Operational Restrictions**

1. Filters for particulate emissions shall be maintained in good working order at all times when the booth is in operation.

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

1. The permittee shall collect and record the following information for each day when metal parts are coated:
  - a. The name, identification number, and type (in order to identify the appropriate limit in section A.2.a. of these terms and conditions) of each coating employed for metal parts, as applied.
  - b. The VOC content (excluding water and exempt solvents) and the number of gallons of each coating employed for metal parts, as applied.
  - c. The daily volume-weighted average VOC content of all coatings employed for metal parts, as applied, calculated in accordance with the equation specified in paragraph (B)(9) of OAC rule 3745-21-10.
2. The permittee shall collect and record the following information for each day for the coating operation:
  - a. The company identification for each coating employed.
  - b. The number of gallons of each coating employed.
  - c. The OC/VOC content of each coating, in pounds per gallon.
  - d. The total OC/VOC emission rate for all coatings [i.e., summation of (b) x (c) for each coating employed], in pounds per day.
  - e. The number of hours of operation for the booth.
  - f. What type of material (metal or non-metal) was coated each day the emissions unit was in operation.
  - g. On days when non-metal parts were coated, the average hourly emission OC rate (d / e), in pounds per hour.

[Note: The coating information must be for the coatings as employed, including any thinning solvents added at the emissions unit.]

3. The permittee shall collect and record the following information for each month for the entire facility:
  - a. The company identification for each cleanup material employed.
  - b. The number of gallons of each cleanup material employed.
  - c. The VOC content of each cleanup material, in pounds per gallon.

- d. The total VOC emission rate for all cleanup materials employed [i.e., summation of (b) x (c) for each coating employed], in pounds per month.
- e. The amount of cleanup material recovered, in pounds.
- f. The total monthly VOC emissions from cleanup operations, calculated as (d) - (e), in pounds.
4. The permittee shall collect and record the following information each month for the facility:
- The name and identification number of each coating, as applied.
  - The individual hazardous air pollutant (HAP)\* content for each HAP of each coating, as applied, as a weight fraction.
  - The total combined HAP content for each HAP of each coating, as applied, as a weight fraction (sum all the individual HAP contents from b).
  - The number of gallons of each coating employed.
  - The density of each coating employed.
  - The name and identification of each cleanup material employed.
  - The individual HAP content for each HAP of each cleanup material, as applied, as a weight fraction.
  - The total combined HAP content of each cleanup material, as applied, as a weight fraction (sum all the individual HAP contents from f).
  - The number of gallons of each cleanup material employed.
  - The density of each cleanup material employed.
  - The total individual HAP emissions 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 [for each HAP the sum of (b) x (d) x (e) for each coating and the sum of (g) x (i) x (j) for each cleanup material].
  - 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 [the sum of (c) x (d) x (e) for each coating plus the sum of (g) x (i) x (j) for each cleanup material].

\* A listing of the HAPs can be found in Section 112(b) of the Clean Air Act or can be obtained by contacting the Northeast District Office of the Ohio EPA. Material Safety Data Sheets typically include a listing of the solvents contained in the coatings or cleanup materials. This information does not have to be kept on a line-by-line basis.

5. The permit to install for this emissions unit 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: Methyl n-Amyl Ketone  
 Pollutant TLV (mg/m<sup>3</sup>): 233.5  
 Maximum Hourly Emission Rate (lbs/hr): 3.5  
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 101.8  
 MAGLC (ug/m<sup>3</sup>): 5,559.5

Pollutant: Isobutyl Acetate  
 Pollutant TLV (mg/m<sup>3</sup>): 712.6  
 Maximum Hourly Emission Rate (lbs/hr): 0.4  
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 11.6 MAGLC (ug/m<sup>3</sup>): 16,967

Pollutant: Toluene  
 Pollutant TLV (mg/m<sup>3</sup>): 188.0  
 Maximum Hourly Emission Rate (lbs/hr): 0.5  
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 16.1 MAGLC (ug/m<sup>3</sup>): 4,485

Pollutant: Butyl Acetate  
 Pollutant TLV (mg/m<sup>3</sup>): 712.6  
 Maximum Hourly Emission Rate (lbs/hr): 1.6  
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 46.3 MAGLC (ug/m<sup>3</sup>): 16,967

Pollutant: Cyclohexanone  
 Pollutant TLV (mg/m<sup>3</sup>): 96.3  
 Maximum Hourly Emission Rate (lbs/hr): 1.0  
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 30.1 MAGLC (ug/m<sup>3</sup>): 2,292

Pollutant: Methyl Ethyl Ketone  
 Pollutant TLV (mg/m<sup>3</sup>): 589.0  
 Maximum Hourly Emission Rate (lbs/hr): 1.8  
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 53.2 MAGLC (ug/m<sup>3</sup>): 14,042

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.).
6. 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 solely due to the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing permit to install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) is (are) defined as a modification under other provisions of the modification definition, then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic 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 quarterly deviation (excursion) reports that identify each day when the daily volume-weighted average coating VOC content exceeds the appropriate limit in section A.2.a of these terms and conditions, when coating metal parts.
2. The permittee shall submit quarterly deviation (excursion) reports that identify each day when non-metal materials were coated and the average daily OC emissions exceeded 8 lbs/hr or 40 pounds and the actual emissions for each such day.
3. The permittee shall submit quarterly deviation (excursion) reports that identify each day when only metal parts were coated and the average daily VOC emissions exceeded 65 pounds and the actual emissions for each such day.
4. The permittee shall submit deviation (excursion) reports that identify each year when the VOC emissions from cleanup materials exceeded 1.4 tons and the actual emissions for each such year.
5. The permittee shall submit deviation (excursion) reports that identify each month when the total HAPs emissions met or exceeded 25 tons per rolling, 12-month period and the actual emissions for each such 12-month period.
6. The permittee shall submit deviation (excursion) reports that identify each month when the emissions of each individual HAP met or exceeded 10 tons per rolling, 12-month period and the actual emissions for each such 12-month period.
7. The permittee shall submit deviation (excursion) reports that identify each year when the VOC emissions exceeded 11.9 tons and the actual emissions for each such year.
8. The quarterly deviation reports shall be submitted in accordance with Section I.A.1.c. of this permit.

**E. Testing Requirements**

1. Compliance with the emission limitations in section A.I. of these terms and conditions shall be determined in accordance with the following method(s):
 

Emission Limitation:  
The appropriate limit from section A.2.a. of these terms and conditions, in lbs of VOC per gallon of coating, excluding water and exempt solvents, as a daily, volume-weighted average, for coatings used to coat metal parts

Applicable Compliance Method:  
Compliance shall be determined based upon the record keeping specified in section C.1. of these terms and conditions.

Emission Limitation:  
8 lbs of OC per hour and 40 lbs of OC per day on any day when non-metal parts are coated

Applicable Compliance Method:  
Compliance shall be determined based upon the record keeping specified in section C.2. of these terms and conditions.

Emission Limitation:  
65 lbs of VOC per day on any day only metal parts are coated

Applicable Compliance Method:  
Compliance shall be demonstrated based upon the record keeping specified in section C.2. of these terms and conditions.

Emission Limitation:  
11.9 tons VOC per year from the coating operations

Applicable Compliance Method:  
Compliance shall be determined by summing the daily emissions determined from the record keeping specified in section C.2. of these terms and conditions.

Emission Limitation:  
1.4 tons VOC per year for cleanup operations facility-wide

Applicable Compliance Method:  
Compliance shall be determined based upon the record keeping specified in section C.3. of these terms and conditions.

Emission Limitations:  
less than 10 TPY, as a rolling, 12-month summation, of any individual HAP from the entire facility

less than 25 TPY, as a rolling, 12-month summation, of total HAPs from the entire facility

Applicable Compliance Method:  
Compliance shall be determined based upon the record keeping specified in section C.4. of these terms and conditions.

**F. Miscellaneous Requirements**

1. None