Facility ID: 1318200471 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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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.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P002 - Silicone Rubber Cells (Cells 1, 2, and 3 which include up to 50 16-carrier braiders, up to 1 36-carrier braider, up to 8 24-carrier braiders, up to 3 24-carrier shielders, up to 4 16-carrier shielders, and Lacquer lines #1, A, B, and C)	OAC rule 3745-31-05(A)(3) (PTI 13-04208 issued 3/28/06)	Acetone emissions for this emissions unit shall not exceed 638.22 pounds per day, and 116.5 tons per year. Organic compound (OC) emissions for this emissions unit shall not exceed 1.34 pounds per hour, 32.2 pounds per day, and 5.9 tons per year (coatings and/or cleanup), not including nonphotochemically reactive exempt solvents. See A.2.a and A.2.b below. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-21-07(G)(2)	

2. **Additional Terms and Conditions**

   (a) On days when photochemically reactive materials (coatings and/or cleanup) are employed, acetone emissions and any other nonphotochemically reactive exempt solvent emissions shall not be included towards the OC limit since acetone and any of the exempt solvents are not photochemically reactive per OAC rule 3745-21-07(G)(9)(f), OAC rule 3745-21-01(B)(6), and OAC rule 3745-21-01(C)(5).
   The short term and annual OC emission limitations are based on the emission units' potential to emit. Therefore, daily record keeping or reporting is not required to demonstrate compliance with these limits.

B. **Operational Restrictions**

1. None

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

1. The permittee shall collect and record the following information each month for this emissions unit:

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

   b. the acetone and OC content (excluding nonphotochemically reactive exempt solvents) of each coating, in pounds per gallon or pounds per pound, as employed;

c. the amount, in gallons or pounds, of each coating employed;

d. the name and identification number of each cleanup material employed;

e. the acetone and OC content (excluding nonphotochemically reactive exempt solvents) of each cleanup material employed, in pounds per gallon or pounds per pound;

f. the amount, in gallons or pounds, of each cleanup material employed;

g. the total amount of cleanup material taken off-site, in gallons or pounds;

h. the total acetone emissions from cleanup material in pounds per month, calculated as the summation of { [e x (f - g)] x 1.0 (AP-42 factor) } for all cleanup materials;

i. the total OC emissions (excluding nonphotochemically reactive exempt solvents) from cleanup material in pounds per month, calculated as the summation of { [e x (f - g)] x 1.0 (AP-42 factor) } for all cleanup materials;

j. the total acetone emissions from all coatings, in pounds per month, calculated as the summation of [(b x c)] for all coatings;

k. the total OC emission (excluding nonphotochemically reactive exempt solvents) from all coatings, in pounds per month, calculated as the summation of [(b x c)] for all coatings;

l. the total number of days this emissions unit was in operation during the month;

m. the average daily acetone emissions, in pounds per day, calculated as [(h + j) / l] ;

n. the average daily OC emissions (excluding nonphotochemically reactive exempt solvents), in pounds per day, calculated as [(i + k) / l];

o. the total monthly acetone emissions, in pounds per month, calculated as the summation of (h + j);
p. the total monthly OC emissions (excluding nonphotochemically reactive exempt solvents), in pounds per month, calculated as the summation of (i + k);

q. the actual hours of operation for this emissions unit per month; and

r. the average hourly OC emissions (excluding nonphotochemically reactive exempt solvents), in pounds per hour, calculated as (p / q).

Notes: 1) The Acetone emissions and OC emissions (excluding nonphotochemically reactive exempt solvents) are based on the emissions units theoretical PTE based on the existing coating and cleanup materials. Provided the chemical constituents for these materials remains similar to the current make-up, the specified emissions limits should not be exceeded.

2) The coating information must be for the coatings as employed, including any thinning solvents added at the emissions unit. Definitions of "photochemically reactive" and "nonphotochemically reactive" are based upon OAC rule 3745-21-01(C)(5). The definitions of "VOC" as used in this documentation refers to "non-exempt, photochemically reactive material "as found in"An Explanation of Ohio Air Pollution Hydrocarbon Regulations" originally published June 29, 1972 and republished October 6, 2000 as approved by the Ohio EPA for technical guidance.

2. The permittee shall collect and record the annual acetone and OC emissions (excluding nonphotochemically reactive exempt solvents) from all coatings and cleanup materials, in pounds or tons per year, as the sum of monthly emissions over the 12 month calendar period (sum of C.1.o and C.1.p above over the calendar year).

3. The permit to install for this emissions unit [P002] was evaluated based on the actual 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 to this emissions unit for each toxic pollutant, using data from the permit to install application, and modeling was performed for the toxic pollutant(s) emitted at over a ton per year using the SCREEN 3.0 model or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the use of the SCREEN 3.0 (or other approved) model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as required in Engineering Guide #70. The following summarizes the results of the modeling for the "worst case" pollutant(s):

a. Pollutant: Acetone
TLV (mg/m3): 1187.12
Maximum Hourly Emission Rate (lbs/hr): 26.59 (total project)
Predicted 1-Hour Maximum Ground-Level Concentration (g/m3): 26645.18
MAGLC (g/m3): 28264.68

b. Pollutant: Methyl Ethyl Ketone (MEK)
TLV (mg/m3): 589.78
Maximum Hourly Emission Rate (lbs/hr): 1.08 (total project)
Predicted 1-Hour Maximum Ground-Level Concentration (g/m3): 1085.17
MAGLC (g/m3): 14042.26

c. Pollutant: 2-Butoxyethanol (EGBE)
TLV (mg/m3): 96.66
Maximum Hourly Emission Rate (lbs/hr): 0.49 (total project)
Predicted 1-Hour Maximum Ground-Level Concentration (g/m3): 490.8
MAGLC (g/m3): 2301.49

d. Pollutant: Butanol
TLV (mg/m3): 60.63

Maximum Hourly Emission Rate (lbs/hr): 1.22 (total project)
Predicted 1-Hour Maximum Ground-Level Concentration (g/m3): 1223.0
MAGLC (g/m3): 1443.57

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

a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a compound or chemical with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled, as documented in the most current version of the American Conference of Governmental Industrial Hygienists' (ACGIH's) handbook entitled "TLVs and BEIs" ("Threshold Limit Values for Chemical Substances and Physical Agents, Biological Exposure Indices");

b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and

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

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 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) meet(s)

5. 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 the evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and

c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

D. **Reporting Requirements**

1. The permittee shall submit deviation (excursion) reports that include the following information:

a. an identification of each month during which the daily acetone emissions from all coatings and cleanup materials exceeded 638.22 pounds per day. This report shall include the actual average daily acetone emissions, an identification of the probable cause for such deviation, and a description of any corrective actions or preventative measures which have been, or will be, taken to correct the occurrence and prevent reoccurrence;

b. an identification of each month during which the average hourly OC emissions (excluding nonphotochemically reactive exempt solvents) from all coatings and cleanup materials exceeded 1.34 pounds per hour. This report shall include the actual average hourly OC emissions, an identification of the probable cause for such deviation, and a description of any corrective actions or preventative measures which have been, or will be, taken to correct the occurrence and prevent reoccurrence; and

c. an identification of each month during which the daily OC emissions (excluding nonphotochemically reactive exempt solvents) from all coatings and cleanup materials exceeded 32.2 pounds per day. This report shall include the actual average daily OC emissions, an identification of the probable cause for such deviation, and a description of any corrective actions or preventative measures which have been, or will be, taken to correct the occurrence and prevent reoccurrence

These reports shall be submitted to the Cleveland Division of Air Quality (Cleveland DAQ) within 30 days following the end of the calendar month during which they were identified.

2. The permittee shall submit to the Cleveland DAQ an annual emissions report including the annual acetone and OC emissions (excluding nonphotochemically reactive exempt solvents) for this emissions unit. This report shall be submitted by January 31 of each calendar year.

E. **Testing Requirements**

1. Compliance with the emission limitation(s) and operational restriction specified in Section A.1 of these terms and conditions shall be determined in accordance with the following method(s):
Emission Limitation:
638.22 lbs Acetone per day

Applicable Compliance Method:
This emission limitation is based upon the unit's potential to emit. The potential to emit calculations, as shown in the following equations, were derived using company-specified process data.

Extrapolating Factors To Determine Maximum Material Usage (based on inherent limitations)

Adjustment = [(maximum process line speed) / (average process line speed based on CY-2001 production figures)] * [(Potential Annual Facility Hours, 6739) / (Annual Operational Hours, 6000 hours based on CY-2001 data)]

Adjustment Factor = [(40 ft / min) / (20 ft / min)] * [(6739 hrs / yr) / (6000 hrs / yr)]

Adjustment Factor = 2.25

Note: The facility has an inherent physical limitation in the production of their product. This is the result of the mandatory time necessary to change rolls and preventative maintenance to keep the process running smoothly. Since roll size varies, an average product roll size was used to calculate this limitation. Average roll size is 4000 ft, maximum machine process capacity = 40 ft/min, average machine process capacity = 20 ft/min, average time required to change roll (remove, label, bring new, thread components, connect, adjust settings, etc.) is 30 minutes changeover. Based on this, it takes 100 minutes to produce a roll and 30 minutes to change over so maximum time to fully produce a roll is 130 minutes. There are 1440 minutes / day and 1 roll is processed in 130 minutes so there is a limitation of 11 rolls produced per day @ 4000 ft (or 44307.7 ft/day). Since maximum capacity is 40 fpm (57600 ft/day) but limitations are imposed at 44307.7 ft/day; then the facility's maximum run hours is limited to 0.769 * 24 hrs/day (18.46 hrs/day, 6738 hrs/yr).

Potential Material Usage
Theoretical Annual Acetone Material Usage = (CY-2001 acetone material usage figures) * (Adjustment Factor)
Theoretical Annual Acetone Material Usage = (103711 pounds/yr) * 2.25) = 232969 pounds/yr

Potential Emissions
Theoretical Annual Acetone Emissions = (Theoretical Annual Acetone Material Usage) * (Acetone Content, set at 100% by weight)

Theoretical Annual Acetone Emissions = (232969 pounds/yr) * (100%) * (1 ton/2000 pounds) = 116.5 tpy

Daily Acetone Emissions (lb/day) = (Theoretical Annual Acetone Emissions) / (365 days / yr)

Daily Acetone Emissions (lb/day) = [(232969 pounds/yr) / (365 days / yr)] = 638.22 pounds / day
Emission Limitation:
116.5 tpy Acetone

Applicable Compliance Method:
This emission limitation is based upon the unit's potential to emit. The potential to emit calculations, as shown in section E.1.a, were derived using company-specified process data.
Emission Limitation:
32.2 lbs OC / day (excluding nonphotochemically reactive exempt solvents)

Applicable Compliance Method:
This emission limitation is based upon the unit's potential to emit. The potential to emit calculations, as shown in the following equations, were derived using company-specified process data.

Extrapolating Factors To Determine Maximum Material Usage (based on inherent limitations)

Adjustment = [(maximum process line speed) / (average process line speed based on CY-2001 production figures)] * [(Potential Annual Facility Hours, 6739) / (Annual Operational Hours, 6000 hours based on CY-2001 data)]

Adjustment Factor = [(40 ft / min) / (20 ft / min)] * [(6739 hrs / yr) / (6000 hrs / yr)]

Adjustment Factor = 2.25

Note: The facility has an inherent physical limitation in the production of their product. This is the result of the mandatory time necessary to change rolls and preventative maintenance to keep the process running smoothly. Since roll size varies, an average product roll size was used to calculate this limitation. Average roll size is 4000 ft, maximum machine process capacity = 40 ft/min, average machine process capacity = 20 ft/min, average time required to change roll (remove, label, bring new, thread components, connect, adjust settings, etc.) is 30 minutes changeover. Based on this, it takes 100 minutes to produce a roll and 30 minutes to change over so maximum time to fully produce a roll is 130 minutes. There are 1440 minutes / day and 1 roll is processed in 130 minutes so there is a limitation of 11 rolls produced per day @ 4000 ft (or 44307.7 ft/day). Since maximum capacity is 40 fpm (57600 ft/day) but limitations are imposed at 44307.7 ft/day; then the facility's maximum run hours is limited to 0.769 * 24 hrs/day (18.46 hrs/day, 6738.46 hrs/yr).

Potential Material Usage
Theoretical Annual Organic Material Usage = (CY-2001 organic material usage figures) * (Adjustment Factor)
Theoretical Annual Organic Material Usage = (5203 pounds/yr) * (2.25) = 11707 pounds/yr

Potential Emissions
Theoretical Annual OC Emissions = (Theoretical Annual Organic Material Usage) * (organic material content, set at 100% by weight)

Theoretical Annual OC Emissions = (11707 pounds/yr) * (100%) * (1 ton / 2000 pounds) = 5.9 tpy

Daily OC Emissions (lb/day) = (Theoretical Annual OC Emissions) / (365 days / yr)

Daily OC Emissions (lb/day) = [(11707 pounds/yr) / (365 days / yr)] = 32.2 pounds / day

Hourly OC Emissions (lb/hr) = (Daily OC Emissions) / (24 hrs/day)

Hourly OC Emissions (lb/hr) = [(32.2 pounds/day) / (24 hrs / day)] = 1.34 pounds / hr
Emission Limitation:
5.9 tpy OC (excluding nonphotochemically reactive exempt solvents)

Applicable Compliance Method:
This emission limitation is based upon the unit's potential to emit. The potential to emit calculations, as shown in section E.1.c, were derived using company-specified process data.
Emission Limitation:
1.34 lbs OC / hour (excluding nonphotochemically reactive exempt solvents)

Applicable Compliance Method:
This emission limitation is based upon the unit's potential to emit. The potential to emit calculations, as shown in section E.1.c, were derived using company-specified process data.

2. Formulation data or USEPA Method 24 (40 CFR Part 60, Appendix A) shall be used to determine the OC contents of the coatings. Formulation data shall be used to determine the OC contents of the cleanup materials. The Cleveland DAQ may require that USEPA Method 24 be used to determine the OC content of the coatings. If an owner or operator determines that Method 24 cannot be used for a particular coating, the permittee shall so notify the administrator of the USEPA and shall use formulation data for that coating to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24.

F. **Miscellaneous Requirements**

1. None

Facility ID: 1318200471 Emissions Unit ID: P005 Issuance type: Final State Permit To Operate

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Part II - Special Terms and Conditions

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

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

(a) None.

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

(a) None.

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

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P005 - Glenro CHOICE Machine G1 (enamel and silicone line: heat cured, revised water based coatings)	OAC rule 3745-31-05(A)(3) (PTI 13-04208 issued 3/28/06)	Organic compound (OC) emissions for this emissions unit shall not exceed 0.81 pound per hour, 16.2 pounds per day, and 2.96 tons per year, not including nonphotochemically reactive exempt solvents. See A.2.a and A.2.b below.
	OAC rule 3745-21-07(G)(2)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. **Additional Terms and Conditions**

(a) The short term and annual OC emission limitations are based on the emission units' potential to emit. Therefore, daily record keeping or reporting is not required to demonstrate compliance with these limits. On days when photochemically reactive materials (coatings and/or cleanup) are employed, any emissions from nonphotochemically reactive exempt solvents shall not be included towards the OC limit since nonphotochemically reactive exempt solvents are not photochemically reactive per OAC rule 3745-21-07(G)(9)(f), OAC rule 3745-21-01(B)(6), and OAC rule 3745-21-01(C)(5).

B. **Operational Restrictions**

1. None

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

1. The permittee shall collect and record the following information each month for this emissions unit:

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

b. the OC content (excluding nonphotochemically reactive exempt solvents) of each coating, in pounds per gallon or pounds per pound, as employed;

c. the amount, in gallons or pounds, of each coating employed;

d. the name and identification number of each cleanup material employed;

e. the OC content (excluding nonphotochemically reactive exempt solvents) of each cleanup material employed,

in pounds per gallon or pounds per pound;

f. the amount, in gallons or pounds, of each cleanup material employed;

g. the total amount of cleanup material taken off-site, in gallons or pounds;

h. the total OC emissions from cleanup material in pounds per month, calculated as the summation of { [e x (f - g)] x 1.0 (AP-42 factor, assuming 100% evaporative loss) } for all cleanup materials;

i. the total OC emissions (excluding nonphotochemically reactive exempt solvents) from all coatings, in pounds per month, calculated as the summation of [(b x c) x 1.0 (AP-42 factor, assuming 100% evaporative loss)] for all coatings;

j. the total number of days this emissions unit was in operation during the month;

k. the average daily OC emissions (excluding nonphotochemically reactive exempt solvents), in pounds per day, calculated as [(h + i) / j] ;

l. the total monthly OC emissions (excluding nonphotochemically reactive exempt solvents), in pounds per month, calculated as the summation of (h + i);

m. the actual hours of operation for this emissions unit per month; and

n.the average hourly OC emissions (excluding nonphotochemically reactive exempt solvents), in pounds per hour, calculated as (l / m).
Notes: 1) The OC emissions (excluding nonphotochemically reactive exempt solvents) are based on the emissions units theoretical PTE based on the existing coating and cleanup materials. Provided the chemical constituents for these materials remains similar to the current make-up, the specified emissions limits should not be exceeded.

2) The coating information must be for the coatings as employed, including any thinning solvents added at the emissions unit. Definitions of "photochemically reactive" and "nonphotochemically reactive" are based upon OAC rule 3745-21-01(C)(5). The definitions of "VOC" as used in this documentation refers to "non-exempt, photochemically reactive material" as found in "An Explanation of Ohio Air Pollution Hydrocarbon Regulations" originally published June 29, 1972 and republished October 6, 2000 as approved by the Ohio EPA for technical guidance.

2. The permittee shall collect and record the annual OC emissions (excluding nonphotochemically reactive exempt solvents) from all coatings and cleanup materials, in pounds or tons per year, as the sum of monthly emissions over the 12 month calendar period (sum of C.1.l above over the calendar year).

3. The permit to install for this emissions unit [P005] was evaluated based on the actual 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 to this emissions unit for each toxic pollutant, using data from the permit to install application, and modeling was performed for the toxic pollutant(s) emitted at over a ton per year using the SCREEN 3.0 model or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the use of the SCREEN 3.0 (or other approved) model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as required in Engineering Guide #70. The following summarizes the results of the modeling for the "worst case" pollutant(s):

a. Pollutant: Methyl Ethyl Ketone (MEK)
TLV (mg/m3): 589.78
Maximum Hourly Emission Rate (lbs/hr): 1.08 (total project)
Predicted 1-Hour Maximum Ground-Level Concentration (g/m3): 1085.17
MAGLC (g/m3): 14042.26

b. Pollutant: 2-Butoxyethanol (EGBE)
TLV (mg/m3): 96.66
Maximum Hourly Emission Rate (lbs/hr): 0.49 (total project)
Predicted 1-Hour Maximum Ground-Level Concentration (g/m3): 490.8
MAGLC (g/m3): 2301.49

c. Pollutant: Butanol
TLV (mg/m3): 60.63
Maximum Hourly Emission Rate (lbs/hr): 1.22 (total project)
Predicted 1-Hour Maximum Ground-Level Concentration (g/m3): 1223.0
MAGLC (g/m3): 1443.57

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

a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a compound or chemical with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled, as documented in the most current version of the American Conference of Governmental Industrial Hygienists' (ACGIH's) handbook entitled "TLVs and BEIs" ("Threshold Limit Values for Chemical Substances and Physical Agents, Biological Exposure Indices");

b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and

c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow,

changes in stack height, changes in stack diameter, etc.).
If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 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) meet(s) the definition of a "modification" under other provisions of the rule, then the permittee shall obtain a final permit to install prior to the change.

5. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will 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 the evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and

c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

D. **Reporting Requirements**

1. The permittee shall submit deviation (excursion) reports that include the following information:

a. an identification of each month during which the average hourly OC emissions (excluding nonphotochemically reactive exempt solvents) from all coatings and cleanup materials exceeded 0.81 pound per hour. This report shall include the actual average hourly OC emissions, an identification of the probable cause for such deviation, and a description of any corrective actions or preventative measures which have been, or will be, taken to correct the occurrence and prevent reoccurrence; and

b. an identification of each month during which the daily OC emissions (excluding nonphotochemically reactive exempt solvents) from all coatings and cleanup materials exceeded 16.2 pounds per day. This report shall include the actual average daily OC emissions, an identification of the probable cause for such deviation, and a description of any corrective actions or preventative measures which have been, or will be, taken to correct the occurrence and prevent reoccurrence.

These reports shall be submitted to the Cleveland Division of Air Quality (Cleveland DAQ) within 30 days following the end of the calendar month during which they were identified.

2. The permittee shall submit to the Cleveland DAQ an annual emissions report including the annual OC emissions (excluding nonphotochemically reactive exempt solvents) for this emissions unit. This report shall be submitted by January 31 of each calendar year.

E. **Testing Requirements**

1. Compliance with the emission limitation(s) and operational restriction specified in Section A.1 of these terms and conditions shall be determined in accordance with the following method(s):

a. Emission Limitation:
16.2 lbs OC/ day (excluding nonphotochemically reactive exempt solvents)

Applicable Compliance Method:
This emission limitation is based upon the unit's potential to emit. The potential to emit calculations, as shown in the following equations, were derived using company-specified process data.

Extrapolating Factors To Determine Maximum Material Usage (based on inherent limitations)

Adjustment = [(maximum process line speed) / (average process line speed based on CY-2001 production figures)] * [(Potential Annual Facility Hours, 7300) / (Annual Operational Hours, 6000 hours based on CY-2001 data)]

Adjustment Factor = [(40 ft / min) / (23 ft / min)] * [(7300 hrs / yr) / (6000 hrs / yr)]

Adjustment Factor = 2.12
Note: The facility has an inherent physical limitation in the production of their product. This is the result of the mandatory time necessary to change rolls and preventative maintenance to keep the process running smoothly. Since roll size varies, an average product roll size was used to calculate this limitation. Average roll size is 6000 ft, maximum machine process capacity = 40 ft/min, average machine process capacity = 23 ft/min, average time required to change roll (remove, label, bring new, thread components, connect, adjust settings, etc.) is 30 minutes changeover. Based on this, it takes 150 minutes to produce a roll and 30 minutes to change over so maximum time to fully produce a roll is 180 minutes. There are 1440 minutes / day and 1 roll is processed in 180 minutes so there is a limitation of 8 rolls produced per day @ 6000 ft (or 48000 ft/day). Since maximum capacity is 40 fpm (57600 ft/day) but limitations are imposed at 48000 ft/day; then the facility's maximum run hours is limited to 0.833 * 24 hrs/day (20.0 hrs/day, 7300 hrs/yr).

Potential Material Usage
Theoretical Annual Organic Material Usage = (CY-2001 organic material usage figures) * (Adjustment Factor)

Theoretical Annual Organic Material Usage = (2789 pounds/yr) * (2.12) = 5913 pounds/yr

Potential Emissions
Theoretical Annual OC Emissions = (Theoretical Annual Organic Material Usage) * (organic material content, set at 100% by weight)

Theoretical Annual OC Emissions = (5913 pounds/yr) * (100%) * (1 ton / 2000 pounds) = 2.96 tpy

Daily OC Emissions (lb/day) = (Theoretical Annual OC Emissions) / (365 days / yr)

Daily OC Emissions (lb/day) = [(5913 pounds/yr) / (365 days / yr)] = 16.2 pounds / day

Hourly OC Emissions (lb/hr) = (Daily OC Emissions) / (20 hrs/day)

Hourly OC Emissions (lb/hr) = [(16.2 pounds/day) / (20 hrs / day)] = 0.81 pound / hr
b. Emission Limitation:
2.96 tpy OC (excluding nonphotochemically reactive exempt solvents)

Applicable Compliance Method:
This emission limitation is based upon the unit's potential to emit. The potential to emit calculations, as shown in section E.1.a, were derived using company-specified process data.

c. Emission Limitation:
0.81 lb OC/ hr (excluding nonphotochemically reactive exempt solvents)

Applicable Compliance Method:
This emission limitation is based upon the unit's potential to emit. The potential to emit calculations, as shown in section E.1.a, were derived using company-specified process data.

2. Formulation data or USEPA Method 24 (40 CFR Part 60, Appendix A) shall be used to determine the OC contents of the coatings. Formulation data shall be used to determine the OC contents of the cleanup materials. The Cleveland DAQ may require that USEPA Method 24 be used to determine the OC content of the coatings. If an owner or operator determines that Method 24 cannot be used for a particular coating, the permittee shall so notify the administrator of the USEPA and shall use formulation data for that coating to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24.

F. **Miscellaneous Requirements**

1. None

Facility ID: 1318200471 Emissions Unit ID: P006 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.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P006 - Glenro CHOICE Machine G1 (enamel and silicone line: heat cured, revised water based coatings)	OAC rule 3745-31-05(A)(3) (PTI 13-04208 issued 3/28/06)	Organic compound (OC) emissions for this emissions unit shall not exceed 0.81 pound per hour, 16.2 pounds per day, and 2.96 tons per year, not including nonphotochemically reactive exempt solvents.
	OAC rule 3745-21-07(G)(2)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). See A.2.a and A.2.b below.

2. **Additional Terms and Conditions**

(a) The short term and annual OC emission limitations are based on the emission units' potential to emit. Therefore, daily record keeping or reporting is not required to demonstrate compliance with these limits. On days when photochemically reactive materials (coatings and/or cleanup) are employed, any emissions from nonphotochemically reactive exempt solvents shall not be included towards the OC limit since nonphotochemically reactive exempt solvents are not photochemically reactive per OAC rule 3745-21-07(G)(9)(f), OAC rule 3745-21-01(B)(6), and OAC rule 3745-21-01(C)(5).

B. **Operational Restrictions**

1. None

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

1. The permittee shall collect and record the following information each month for this emissions unit:

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

   b. the OC content (excluding nonphotochemically reactive exempt solvents) of each coating, in pounds per gallon or pounds per pound, as employed;

   c. the amount, in gallons or pounds, of each coating employed;

   d. the name and identification number of each cleanup material employed;

   e. the OC content (excluding nonphotochemically reactive exempt solvents) of each cleanup material employed, in pounds per gallon or pounds per pound;

   f. the amount, in gallons or pounds, of each cleanup material employed;

   g. the total amount of cleanup material taken off-site, in gallons or pounds;

   h. the total OC emissions from cleanup material in pounds per month, calculated as the summation of { [e x (f - g)] x 1.0 (AP-42 factor, assuming 100% evaporative loss) } for all cleanup materials;

   i. the total OC emissions (excluding nonphotochemically reactive exempt solvents) from all coatings, in pounds per month, calculated as the summation of [(b x c) x 1.0 (AP-42 factor, assuming 100% evaporative loss)] for all coatings;

   j. the total number of days this emissions unit was in operation during the month;

   k. the average daily OC emissions (excluding nonphotochemically reactive exempt solvents), in pounds per day, calculated as [(h + i) / j];

   l. the total monthly OC emissions (excluding nonphotochemically reactive exempt solvents), in pounds per month, calculated as the summation of (h + i);

   m. the actual hours of operation for this emissions unit per month; and

   n. the average hourly OC emissions (excluding nonphotochemically reactive exempt solvents), in pounds per hour, calculated as (l / m).
   Notes: 1) The OC emissions (excluding nonphotochemically reactive exempt solvents) are based on the emissions units theoretical PTE based on the existing coating and cleanup materials. Provided the chemical constituents for these materials remains similar to the current make-up, the specified emissions limits should not be exceeded.

   2) The coating information must be for the coatings as employed, including any thinning solvents added at the emissions unit. Definitions of "photochemically reactive" and "nonphotochemically reactive" are based upon OAC rule 3745-21-01(C)(5). The definitions of "VOC" as used in this documentation refers to "non-exempt, photochemically reactive material" as found in "An Explanation of Ohio Air Pollution Hydrocarbon Regulations" originally published June 29, 1972 and republished October 6, 2000 as approved by the Ohio EPA for technical guidance.

2. The permittee shall collect and record the annual OC emissions (excluding nonphotochemically reactive exempt solvents) from all coatings and cleanup materials, in pounds or tons per year, as the sum of monthly emissions over the 12 month calendar period (sum of C.1.l above over the calendar year).

3. The permit to install for this emissions unit [P006] was evaluated based on the actual 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 to this emissions unit for each toxic pollutant, using data from the permit to install application, and modeling was performed for the toxic pollutant(s) emitted at over a ton per year using the SCREEN 3.0 model or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the use of the SCREEN 3.0 (or other approved) model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as required in Engineering Guide #70. The following summarizes the results of the modeling for the "worst case" pollutant(s):

   a. Pollutant: Methyl Ethyl Ketone (MEK)
   TLV (mg/m3): 589.78
   Maximum Hourly Emission Rate (lbs/hr): 1.08 (total project)
   Predicted 1-Hour Maximum Ground-Level Concentration (g/m3): 1085.17
   MAGLC (g/m3): 14042.26

   b. Pollutant: 2-Butoxyethanol (EGBE)
   TLV (mg/m3): 96.66
   Maximum Hourly Emission Rate (lbs/hr): 0.49 (total project)
   Predicted 1-Hour Maximum Ground-Level Concentration (g/m3): 490.8
   MAGLC (g/m3): 2301.49

   c. Pollutant: Butanol
   TLV (mg/m3): 60.63
   Maximum Hourly Emission Rate (lbs/hr): 1.22 (total project)
   Predicted 1-Hour Maximum Ground-Level Concentration (g/m3): 1223.0
   MAGLC (g/m3): 1443.57

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

can affect the parameters used in applying the "Air Toxic Policy" include the following:

a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a compound or chemical with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled, as documented in the most current version of the American Conference of Governmental Industrial Hygienists' (ACGIH's) handbook entitled "TLVs and BEIs" ("Threshold Limit Values for Chemical Substances and Physical Agents, Biological Exposure Indices");

b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and

c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).
If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 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) meet(s) the definition of a "modification" under other provisions of the rule, then the permittee shall obtain a final permit to install prior to the change.

5. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will 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 the evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and

c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

D. **Reporting Requirements**

1. The permittee shall submit deviation (excursion) reports that include the following information:

a. an identification of each month during which the average hourly OC emissions (excluding nonphotochemically reactive exempt solvents) from all coatings and cleanup materials exceeded 0.81 pound per hour. This report shall include the actual average hourly OC emissions, an identification of the probable cause for such deviation, and a description of any corrective actions or preventative measures which have been, or will be, taken to correct the occurrence and prevent reoccurrence; and

b. an identification of each month during which the daily OC emissions (excluding nonphotochemically reactive exempt solvents) from all coatings and cleanup materials exceeded 16.2 pounds per day. This report shall include the actual average daily OC emissions, an identification of the probable cause for such deviation, and a description of any corrective actions or preventative measures which have been, or will be, taken to correct the occurrence and prevent reoccurrence.

These reports shall be submitted to the Cleveland Division of Air Quality (Cleveland DAQ) within 30 days following the end of the calendar month during which they were identified.

2. The permittee shall submit to the Cleveland DAQ an annual emissions report including the annual OC emissions (excluding nonphotochemically reactive exempt solvents) for this emissions unit. This report shall be submitted by January 31 of each calendar year.

E. **Testing Requirements**

1. Compliance with the emission limitation(s) and operational restriction specified in Section A.1 of these terms and conditions shall be determined in accordance with the following method(s):

a. Emission Limitation:
16.2 lbs OC/ day (excluding nonphotochemically reactive exempt solvents)

Applicable Compliance Method:
This emission limitation is based upon the unit's potential to emit. The potential to emit calculations, as shown in the following equations, were derived using company-specified process data.

Extrapolating Factors To Determine Maximum Material Usage (based on inherent limitations)

Adjustment = [(maximum process line speed) / (average process line speed based on CY-2001 production figures)] * [(Potential Annual Facility Hours, 7300) / (Annual Operational Hours, 6000 hours based on CY-2001 data)]

Adjustment Factor = [(40 ft / min) / (23 ft / min)] * [(7300 hrs / yr) / (6000 hrs / yr)]

Adjustment Factor = 2.12
Note: The facility has an inherent physical limitation in the production of their product. This is the result of the mandatory time necessary to change rolls and preventative maintenance to keep the process running smoothly. Since roll size varies, an average product roll size was used to calculate this limitation. Average roll size is 6000 ft, maximum machine process capacity = 40 ft/min, average machine process capacity = 23 ft/min, average time required to change roll (remove, label, bring new, thread components, connect, adjust settings, etc.) is 30 minutes changeover. Based on this, it takes 150 minutes to produce a roll and 30 minutes to change over so maximum time to fully produce a roll is 180 minutes. There are 1440 minutes / day and 1 roll is processed in 180 minutes so there is a limitation of 8 rolls produced per day @ 6000 ft (or 48000 ft/day). Since maximum capacity is 40 fpm (57600 ft/day) but limitations are imposed at 48000 ft/day; then the facility's maximum run hours is limited to 0.833 * 24 hrs/day (20.0 hrs/day, 7300 hrs/yr).

Potential Material Usage

Theoretical Annual Organic Material Usage = (CY-2001 organic material usage figures) * (Adjustment Factor)

Theoretical Annual Organic Material Usage = (2789 pounds/yr) * (2.12) = 5913 pounds/yr

Potential Emissions
Theoretical Annual OC Emissions = (Theoretical Annual Organic Material Usage) * (organic material content, set at 100% by weight)

Theoretical Annual OC Emissions = (5913 pounds/yr) * (100%) * (1 ton / 2000 pounds) = 2.96 tpy

Daily OC Emissions (lb/day) = (Theoretical Annual OC Emissions) / (365 days / yr)

Daily OC Emissions (lb/day) = [(5913 pounds/yr) / (365 days / yr)] = 16.2 pounds / day

Hourly OC Emissions (lb/hr) = (Daily OC Emissions) / (20 hrs/day)

Hourly OC Emissions (lb/hr) = [(16.2 pounds/day) / (20 hrs / day)] = 0.81 pound / hr
b. Emission Limitation:
2.96 tpy OC (excluding nonphotochemically reactive exempt solvents)

Applicable Compliance Method:
This emission limitation is based upon the unit's potential to emit. The potential to emit calculations, as shown in section E.1.a, were derived using company-specified process data.

c. Emission Limitation:
0.81 lb OC/ hr (excluding nonphotochemically reactive exempt solvents)

Applicable Compliance Method:
This emission limitation is based upon the unit's potential to emit. The potential to emit calculations, as shown in section E.1.a, were derived using company-specified process data.

2. Formulation data or USEPA Method 24 (40 CFR Part 60, Appendix A) shall be used to determine the OC contents of the coatings. Formulation data shall be used to determine the OC contents of the cleanup materials. The Cleveland DAQ may require that USEPA Method 24 be used to determine the OC content of the coatings. If an owner or operator determines that Method 24 cannot be used for a particular coating, the permittee shall so notify the administrator of the USEPA and shall use formulation data for that coating to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24.

F. **Miscellaneous Requirements**

1. None

Facility ID: 1318200471 Emissions Unit ID: P007 Issuance type: Final State Permit To Operate

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Part II - Special Terms and Conditions

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

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

(a) None.

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

(a) None.

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

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P007 - Glenro CHOICE Machine G1 (enamel and silicone line: heat cured, revised water based coatings)	OAC rule 3745-31-05(A)(3) (PTI 13-04208 issued 3/28/06)	Organic compound (OC) emissions for this emissions unit shall not exceed 0.81 pound per hour, 16.2 pounds per day, and 2.96 tons per year, not including nonphotochemically reactive exempt solvents. See A.2.a and A.2.b below.
	OAC rule 3745-21-07(G)(2)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. **Additional Terms and Conditions**

(a) The short term and annual OC emission limitations are based on the emission units' potential to emit. Therefore, daily record keeping or reporting is not required to demonstrate compliance with these limits. On days when photochemically reactive materials (coatings and/or cleanup) are employed, any emissions from nonphotochemically reactive exempt solvents shall not be included towards the OC limit since nonphotochemically reactive exempt solvents are not photochemically reactive per OAC rule 3745-21-07(G)(9)(f), OAC rule 3745-21-01(B)(6), and OAC rule 3745-21-01(C)(5).

B. **Operational Restrictions**

1. None

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

1. The permittee shall collect and record the following information each month for this emissions unit:

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

b. the OC content (excluding nonphotochemically reactive exempt solvents) of each coating, in pounds per gallon or pounds per pound, as employed;

c. the amount, in gallons or pounds, of each coating employed;

d. the name and identification number of each cleanup material employed;

e. the OC content (excluding nonphotochemically reactive exempt solvents) of each cleanup material employed, in pounds per gallon or pounds per pound;

f. the amount, in gallons or pounds, of each cleanup material employed;

g. the total amount of cleanup material taken off-site, in gallons or pounds;

h. the total OC emissions from cleanup material in pounds per month, calculated as the summation of { [e x (f - g)] x 1.0 (AP-42 factor, assuming 100% evaporative loss) } for all cleanup materials;

i. the total OC emissions (excluding nonphotochemically reactive exempt solvents) from all coatings, in pounds per month, calculated as the summation of [(b x c) x 1.0 (AP-42 factor, assuming 100% evaporative loss)] for all coatings;

j. the total number of days this emissions unit was in operation during the month;

k. the average daily OC emissions (excluding nonphotochemically reactive exempt solvents), in pounds per day, calculated as [(h + i) / j];

l. the total monthly OC emissions (excluding nonphotochemically reactive exempt solvents), in pounds per month, calculated as the summation of (h + i);

m. the actual hours of operation for this emissions unit per month; and

n. the average hourly OC emissions (excluding nonphotochemically reactive exempt solvents), in pounds per hour, calculated as (l / m).
Notes: 1) The OC emissions (excluding nonphotochemically reactive exempt solvents) are based on the emissions units theoretical PTE based on the existing coating and cleanup materials. Provided the chemical constituents for these materials remains similar to the current make-up, the specified emissions limits should not be exceeded.

2) The coating information must be for the coatings as employed, including any thinning solvents added at the emissions unit. Definitions of "photochemically reactive" and "nonphotochemically reactive" are based upon OAC rule 3745-21-01(C)(5). The definitions of "VOC" as used in this documentation refers to "non-exempt, photochemically reactive material" as found in "An Explanation of Ohio Air Pollution Hydrocarbon Regulations" originally published June 29, 1972 and republished October 6, 2000 as approved by the Ohio EPA for technical guidance.

2. The permittee shall collect and record the annual OC emissions (excluding nonphotochemically reactive exempt solvents) from all coatings and cleanup materials, in pounds or tons per year, as the sum of monthly emissions over the 12 month calendar period (sum of C.1.l above over the calendar year).

3. The permit to install for this emissions unit [P007] was evaluated based on the actual 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 to this emissions unit for each toxic pollutant, using data from the permit to install application, and modeling was performed for the toxic pollutant(s) emitted at over a ton per year using the SCREEN 3.0 model or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the use of the SCREEN 3.0 (or other approved) model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as required in Engineering Guide #70. The following summarizes the results of the modeling for the "worst case" pollutant(s):

a. Pollutant: Methyl Ethyl Ketone (MEK)
TLV (mg/m3): 589.78
Maximum Hourly Emission Rate (lbs/hr): 1.08 (total project)
Predicted 1-Hour Maximum Ground-Level Concentration (g/m3): 1085.17
MAGLC (g/m3): 14042.26

b. Pollutant: 2-Butoxyethanol (EGBE)
TLV (mg/m3): 96.66
Maximum Hourly Emission Rate (lbs/hr): 0.49 (total project)
Predicted 1-Hour Maximum Ground-Level Concentration (g/m3): 490.8

MAGLC (g/m3): 2301.49

c. Pollutant: Butanol
TLV (mg/m3): 60.63
Maximum Hourly Emission Rate (lbs/hr): 1.22 (total project)
Predicted 1-Hour Maximum Ground-Level Concentration (g/m3): 1223.0
MAGLC (g/m3): 1443.57

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

a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a compound or chemical with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled, as documented in the most current version of the American Conference of Governmental Industrial Hygienists' (ACGIH's) handbook entitled "TLVs and BEIs" ("Threshold Limit Values for Chemical Substances and Physical Agents, Biological Exposure Indices");

b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and

c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).
If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 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) meet(s) the definition of a "modification" under other provisions of the rule, then the permittee shall obtain a final permit to install prior to the change.

5. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will 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 the evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and

c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

D. **Reporting Requirements**

1. The permittee shall submit deviation (excursion) reports that include the following information:

a. an identification of each month during which the average hourly OC emissions (excluding nonphotochemically reactive exempt solvents) from all coatings and cleanup materials exceeded 0.81 pound per hour. This report shall include the actual average hourly OC emissions, an identification of the probable cause for such deviation, and a description of any corrective actions or preventative measures which have been, or will be, taken to correct the occurrence and prevent reoccurrence; and

b. an identification of each month during which the daily OC emissions (excluding nonphotochemically reactive exempt solvents) from all coatings and cleanup materials exceeded 16.2 pounds per day. This report shall include the actual average daily OC emissions, an identification of the probable cause for such deviation, and a description of any corrective actions or preventative measures which have been, or will be, taken to correct the occurrence and prevent reoccurrence.

These reports shall be submitted to the Cleveland Division of Air Quality (Cleveland DAQ) within 30 days following the end of the calendar month during which they were identified.

2. The permittee shall submit to the Cleveland DAQ an annual emissions report including the annual OC emissions (excluding nonphotochemically reactive exempt solvents) for this emissions unit. This report shall be submitted by January 31 of each calendar year.

E. **Testing Requirements**

1. Compliance with the emission limitation(s) and operational restriction specified in Section A.1 of these terms and conditions shall be determined in accordance with the following method(s):

a. Emission Limitation:
16.2 lbs OC/ day (excluding nonphotochemically reactive exempt solvents)

Applicable Compliance Method:
This emission limitation is based upon the unit's potential to emit. The potential to emit calculations, as shown in the following equations, were derived using company-specified process data.

Extrapolating Factors To Determine Maximum Material Usage (based on inherent limitations)

Adjustment = [(maximum process line speed) / (average process line speed based on CY-2001 production figures)] * [(Potential Annual Facility Hours, 7300) / (Annual Operational Hours, 6000 hours based on CY-2001 data)]

Adjustment Factor = [(40 ft / min) / (23 ft / min)] * [(7300 hrs / yr) / (6000 hrs / yr)]

Adjustment Factor = 2.12

Note: The facility has an inherent physical limitation in the production of their product. This is the result of the mandatory time necessary to change rolls and preventative maintenance to keep the process running smoothly. Since roll size varies, an average product roll size was used to calculate this limitation. Average roll size is 6000 ft, maximum machine process capacity = 40 ft/min, average machine process capacity = 23 ft/min, average time required to change roll (remove, label, bring new, thread components, connect, adjust settings, etc.) is 30 minutes changeover. Based on this, it takes 150 minutes to produce a roll and 30 minutes to change over so maximum time to fully produce a roll is 180 minutes. There are 1440 minutes / day and 1 roll is processed in 180 minutes so there is a limitation of 8 rolls produced per day @ 6000 ft (or 48000 ft/day). Since maximum capacity is 40 fpm (57600 ft/day) but limitations are imposed at 48000 ft/day; then the facility's maximum run hours is limited to 0.833 * 24 hrs/day (20.0 hrs/day, 7300 hrs/yr).

Potential Material Usage
Theoretical Annual Organic Material Usage = (CY-2001 organic material usage figures) * (Adjustment Factor)

Theoretical Annual Organic Material Usage = (2789 pounds/yr) * (2.12) = 5913 pounds/yr

Potential Emissions
Theoretical Annual OC Emissions = (Theoretical Annual Organic Material Usage) * (organic material content, set at 100% by weight)

Theoretical Annual OC Emissions = (5913 pounds/yr) * (100%) * (1 ton / 2000 pounds) = 2.96 tpy

Daily OC Emissions (lb/day) = (Theoretical Annual OC Emissions) / (365 days / yr)

Daily OC Emissions (lb/day) = [(5913 pounds/yr) / (365 days / yr)] = 16.2 pounds / day

Hourly OC Emissions (lb/hr) = (Daily OC Emissions) / (20 hrs/day)

Hourly OC Emissions (lb/hr) = [(16.2 pounds/day) / (20 hrs / day)] = 0.81 pound / hr
b. Emission Limitation:
2.96 tpy OC (excluding nonphotochemically reactive exempt solvents)

Applicable Compliance Method:
This emission limitation is based upon the unit's potential to emit. The potential to emit calculations, as shown in section E.1.a, were derived using company-specified process data.

c. Emission Limitation:
0.81 lb OC/ hr (excluding nonphotochemically reactive exempt solvents)

Applicable Compliance Method:
This emission limitation is based upon the unit's potential to emit. The potential to emit calculations, as shown in section E.1.a, were derived using company-specified process data.

2. Formulation data or USEPA Method 24 (40 CFR Part 60, Appendix A) shall be used to determine the OC contents of the coatings. Formulation data shall be used to determine the OC contents of the cleanup materials. The Cleveland DAQ may require that USEPA Method 24 be used to determine the OC content of the coatings. If an owner or operator determines that Method 24 cannot be used for a particular coating, the permittee shall so notify the administrator of the USEPA and shall use formulation data for that coating to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24.

F. **Miscellaneous Requirements**

1. None

Facility ID: 1318200471 Emissions Unit ID: P008 Issuance type: Final State Permit To Operate

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Part II - Special Terms and Conditions

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

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

(a) None.

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

(a) None.

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

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P008- Glenro CHOICE Machine G1 (enamel and silicone line: heat cured, revised water based coatings)	OAC rule 3745-31-05(A)(3) (PTI 13-04208 issued 3/28/06)	Organic compound (OC) emissions for this emissions unit shall not exceed 0.81 pound per hour, 16.2 pounds per day, and 2.96 tons per year, not including nonphotochemically reactive exempt solvents. See A.2.a and A.2.b below.
	OAC rule 3745-21-07(G)(2)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. **Additional Terms and Conditions**

(a) The short term and annual OC emission limitations are based on the emission units' potential to emit. Therefore, daily record keeping or reporting is not required to demonstrate compliance with these limits. On days when photochemically reactive materials (coatings and/or cleanup) are employed, any emissions from nonphotochemically reactive exempt solvents shall not be included towards the OC limit since nonphotochemically reactive exempt solvents are not photochemically reactive per OAC rule 3745-21-07(G)(9)(f), OAC rule 3745-21-01(B)(6), and OAC rule 3745-21-01(C)(5).

B. **Operational Restrictions**

1. None

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

1. The permittee shall collect and record the following information each month for this emissions unit:

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

b. the OC content (excluding nonphotochemically reactive exempt solvents) of each coating, in pounds per gallon or pounds per pound, as employed;

c. the amount, in gallons or pounds, of each coating employed;

d. the name and identification number of each cleanup material employed;

e. the OC content (excluding nonphotochemically reactive exempt solvents) of each cleanup material employed, in pounds per gallon or pounds per pound;

f. the amount, in gallons or pounds, of each cleanup material employed;

g. the total amount of cleanup material taken off-site, in gallons or pounds;

h. the total OC emissions from cleanup material in pounds per month, calculated as the summation of { [e x (f - g)] x 1.0 (AP-42 factor, assuming 100% evaporative loss) } for all cleanup materials;

i. the total OC emissions (excluding nonphotochemically reactive exempt solvents) from all coatings, in pounds per month, calculated as the summation of [(b x c) x 1.0 (AP-42 factor, assuming 100% evaporative loss)] for all coatings;

j. the total number of days this emissions unit was in operation during the month;

k. the average daily OC emissions (excluding nonphotochemically reactive exempt solvents), in pounds per day, calculated as [(h + i) / j];

l. the total monthly OC emissions (excluding nonphotochemically reactive exempt solvents), in pounds per month, calculated as the summation of (h + i);

m. the actual hours of operation for this emissions unit per month; and

n.the average hourly OC emissions (excluding nonphotochemically reactive exempt solvents), in pounds per hour, calculated as (l / m).
Notes: 1) The OC emissions (excluding nonphotochemically reactive exempt solvents) are based on the emissions units theoretical PTE based on the existing coating and cleanup materials. Provided the chemical constituents for these materials remains similar to the current make-up, the specified emissions limits should not be exceeded.

2) The coating information must be for the coatings as employed, including any thinning solvents added at the emissions unit. Definitions of "photochemically reactive" and "nonphotochemically reactive" are based upon OAC rule 3745-21-01(C)(5). The definitions of "VOC" as used in this documentation refers to "non-exempt, photochemically reactive material" as found in "An Explanation of Ohio Air Pollution Hydrocarbon Regulations" originally published June 29, 1972 and republished October 6, 2000 as approved by the Ohio EPA for technical guidance.

2. The permittee shall collect and record the annual OC emissions (excluding nonphotochemically reactive exempt solvents) from all coatings and cleanup materials, in pounds or tons per year, as the sum of monthly emissions over the 12 month calendar period (sum of C.1.l above over the calendar year).

3. The permit to install for this emissions unit [P008] was evaluated based on the actual 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 to this emissions unit for each toxic pollutant, using data from the permit to install application, and modeling was performed for the toxic pollutant(s) emitted at over a ton per year using the SCREEN 3.0 model or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the use of the SCREEN 3.0 (or other approved) model, was compared to the Maximum Acceptable Ground-

Level Concentration (MAGLC), calculated as required in Engineering Guide #70. The following summarizes the results of the modeling for the "worst case" pollutant(s):

a. Pollutant: Methyl Ethyl Ketone (MEK)
TLV (mg/m3): 589.78
Maximum Hourly Emission Rate (lbs/hr): 1.08 (total project)
Predicted 1-Hour Maximum Ground-Level Concentration (g/m3): 1085.17
MAGLC (g/m3): 14042.26

b. Pollutant: 2-Butoxyethanol (EGBE)
TLV (mg/m3): 96.66
Maximum Hourly Emission Rate (lbs/hr): 0.49 (total project)
Predicted 1-Hour Maximum Ground-Level Concentration (g/m3): 490.8
MAGLC (g/m3): 2301.49

c. Pollutant: Butanol
TLV (mg/m3): 60.63
Maximum Hourly Emission Rate (lbs/hr): 1.22 (total project)
Predicted 1-Hour Maximum Ground-Level Concentration (g/m3): 1223.0
MAGLC (g/m3): 1443.57

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

a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a compound or chemical with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled, as documented in the most current version of the American Conference of Governmental Industrial Hygienists' (ACGIH's) handbook entitled "TLVs and BEIs" ("Threshold Limit Values for Chemical Substances and Physical Agents, Biological Exposure Indices");

b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and

c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).
If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 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) meet(s) the definition of a "modification" under other provisions of the rule, then the permittee shall obtain a final permit to install prior to the change.

5. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will 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 the evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and

c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

D. **Reporting Requirements**

1. The permittee shall submit deviation (excursion) reports that include the following information:

a. an identification of each month during which the average hourly OC emissions (excluding nonphotochemically reactive exempt solvents) from all coatings and cleanup materials exceeded 0.81 pound per hour. This report shall include the actual average hourly OC emissions, an identification of the probable cause for such deviation, and a description of any corrective actions or preventative measures which have been, or will be, taken to correct the occurrence and prevent reoccurrence; and

b. an identification of each month during which the daily OC emissions (excluding nonphotochemically reactive exempt solvents) from all coatings and cleanup materials exceeded 16.2 pounds per day. This report shall include the actual average daily OC emissions, an identification of the probable cause for such deviation, and a description of any corrective actions or preventative measures which have been, or will be, taken to correct the occurrence and prevent reoccurrence.

These reports shall be submitted to the Cleveland Division of Air Quality (Cleveland DAQ) within 30 days following the end of the calendar month during which they were identified.

2. The permittee shall submit to the Cleveland DAQ an annual emissions report including the annual OC emissions (excluding nonphotochemically reactive exempt solvents) for this emissions unit. This report shall be submitted by January 31 of each calendar year.

E. **Testing Requirements**

1. Compliance with the emission limitation(s) and operational restriction specified in Section A.1 of these terms and conditions shall be determined in accordance with the following method(s):

a. Emission Limitation:
16.2 lbs OC/ day (excluding nonphotochemically reactive exempt solvents)

Applicable Compliance Method:
This emission limitation is based upon the unit's potential to emit. The potential to emit calculations, as shown in the following equations, were derived using company-specified process data.

Extrapolating Factors To Determine Maximum Material Usage (based on inherent limitations)

Adjustment = [(maximum process line speed) / (average process line speed based on CY-2001 production figures)] * [(Potential Annual Facility Hours, 7300) / (Annual Operational Hours, 6000 hours based on CY-2001 data)]

Adjustment Factor = [(40 ft / min) / (23 ft / min)] * [(7300 hrs / yr) / (6000 hrs / yr)]

Adjustment Factor = 2.12
Note: The facility has an inherent physical limitation in the production of their product. This is the result of the mandatory time necessary to change rolls and preventative maintenance to keep the process running smoothly. Since roll size varies, an average product roll size was used to calculate this limitation. Average roll size is 6000 ft, maximum machine process capacity = 40 ft/min, average machine process capacity = 23 ft/min, average time required to change roll (remove, label, bring new, thread components, connect, adjust settings, etc.) is 30 minutes changeover. Based on this, it takes 150 minutes to produce a roll and 30 minutes to change over so maximum time to fully produce a roll is 180 minutes. There are 1440 minutes / day and 1 roll is processed in 180 minutes so there is a limitation of 8 rolls produced per day @ 6000 ft (or 48000 ft/day). Since maximum capacity is 40 fpm (57600 ft/day) but limitations are imposed at 48000 ft/day; then the facility's maximum run hours is limited to 0.833 * 24 hrs/day (20.0 hrs/day, 7300 hrs/yr).

Potential Material Usage
Theoretical Annual Organic Material Usage = (CY-2001 organic material usage figures) * (Adjustment Factor)

Theoretical Annual Organic Material Usage = (2789 pounds/yr) * (2.12) = 5913 pounds/yr

Potential Emissions
Theoretical Annual OC Emissions = (Theoretical Annual Organic Material Usage) * (organic material content, set at 100% by weight)

Theoretical Annual OC Emissions = (5913 pounds/yr) * (100%) * (1 ton / 2000 pounds) = 2.96 tpy

Daily OC Emissions (lb/day) = (Theoretical Annual OC Emissions) / (365 days / yr)

Daily OC Emissions (lb/day) = [(5913 pounds/yr) / (365 days / yr)] = 16.2 pounds / day

Hourly OC Emissions (lb/hr) = (Daily OC Emissions) / (20 hrs/day)

Hourly OC Emissions (lb/hr) = [(16.2 pounds/day) / (20 hrs / day)] = 0.81 pound / hr
b. Emission Limitation:
2.96 tpy OC (excluding nonphotochemically reactive exempt solvents)

Applicable Compliance Method:
This emission limitation is based upon the unit's potential to emit. The potential to emit calculations, as shown in section E.1.a, were derived using company-specified process data.

c. Emission Limitation:
0.81 lb OC/ hr (excluding nonphotochemically reactive exempt solvents)

Applicable Compliance Method:
This emission limitation is based upon the unit's potential to emit. The potential to emit calculations, as shown in section E.1.a, were derived using company-specified process data.

2. Formulation data or USEPA Method 24 (40 CFR Part 60, Appendix A) shall be used to determine the OC contents of the coatings. Formulation data shall be used to determine the OC contents of the cleanup materials. The Cleveland DAQ may require that USEPA Method 24 be used to determine the OC content of the coatings. If an owner or operator determines that Method 24 cannot be used for a particular coating, the permittee shall so notify the administrator of the USEPA and shall use formulation data for that coating to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24.

F. **Miscellaneous Requirements**

1. None

Facility ID: 1318200471 Emissions Unit ID: P009 Issuance type: Final State Permit To Operate

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Part II - Special Terms and Conditions

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

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

(a) None.

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

(a) None.

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

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P009- Glenro CHOICE Machine G1 (enamel and silicone line: heat cured, revised water based coatings)	OAC rule 3745-31-05(A)(3) (PTI 13-04208 3/28/06)	Organic compound (OC) emissions for this emissions unit shall not exceed 0.81 pound per hour, 16.2 pounds per day, and 2.96 tons per year, not including nonphotochemically reactive exempt solvents.
	OAC rule 3745-21-07(G)(2)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). See A.2.a and A.2.b below.

2. **Additional Terms and Conditions**

(a) The short term and annual OC emission limitations are based on the emission units' potential to emit. Therefore, daily record keeping or reporting is not required to demonstrate compliance with these limits. On days when photochemically reactive materials (coatings and/or cleanup) are employed, any emissions from nonphotochemically reactive exempt solvents shall not be included towards the OC limit since nonphotochemically reactive exempt solvents are not photochemically reactive per OAC rule 3745-21-07(G)(9)(f), OAC rule 3745-21-01(B)(6), and OAC rule 3745-21-01(C)(5).

B. **Operational Restrictions**

1. None

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

1. The permittee shall collect and record the following information each month for this emissions unit:

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

b. the OC content (excluding nonphotochemically reactive exempt solvents) of each coating, in pounds per gallon or pounds per pound, as employed;

c. the amount, in gallons or pounds, of each coating employed;

d. the name and identification number of each cleanup material employed;

e. the OC content (excluding nonphotochemically reactive exempt solvents) of each cleanup material employed, in pounds per gallon or pounds per pound;

f. the amount, in gallons or pounds, of each cleanup material employed;

g. the total amount of cleanup material taken off-site, in gallons or pounds;

h. the total OC emissions from cleanup material in pounds per month, calculated as the summation of { [e x (f - g)] x 1.0 (AP-42 factor, assuming 100% evaporative loss) } for all cleanup materials;

i. the total OC emissions (excluding nonphotochemically reactive exempt solvents) from all coatings, in pounds per month, calculated as the summation of [(b x c) x 1.0 (AP-42 factor, assuming 100% evaporative loss)] for all coatings;

j. the total number of days this emissions unit was in operation during the month;

k. the average daily OC emissions (excluding nonphotochemically reactive exempt solvents), in pounds per day, calculated as [(h + i) / j];

l. the total monthly OC emissions (excluding nonphotochemically reactive exempt solvents), in pounds per month, calculated as the summation of (h + i);

m. the actual hours of operation for this emissions unit per month; and

n. the average hourly OC emissions (excluding nonphotochemically reactive exempt solvents), in pounds per hour, calculated as (l / m).
Notes: 1) The OC emissions (excluding nonphotochemically reactive exempt solvents) are based on the emissions units theoretical PTE based on the existing coating and cleanup materials. Provided the chemical constituents for these materials remains similar to the current make-up, the specified emissions limits should not be exceeded.

2) The coating information must be for the coatings as employed, including any thinning solvents added at the emissions unit. Definitions of "photochemically reactive" and "nonphotochemically reactive" are based upon OAC rule 3745-21-01(C)(5). The definitions of "VOC" as used in this documentation refers to "non-exempt, photochemically reactive material" as found in "An Explanation of Ohio Air Pollution Hydrocarbon Regulations" originally published June 29, 1972 and republished October 6, 2000 as approved by the Ohio EPA for technical

guidance.

2. The permittee shall collect and record the annual OC emissions (excluding nonphotochemically reactive exempt solvents) from all coatings and cleanup materials, in pounds or tons per year, as the sum of monthly emissions over the 12 month calendar period (sum of C.1.l above over the calendar year).

3. The permit to install for this emissions unit [P009] was evaluated based on the actual 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 to this emissions unit for each toxic pollutant, using data from the permit to install application, and modeling was performed for the toxic pollutant(s) emitted at over a ton per year using the SCREEN 3.0 model or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the use of the SCREEN 3.0 (or other approved) model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as required in Engineering Guide #70. The following summarizes the results of the modeling for the "worst case" pollutant(s):

   a. Pollutant: Methyl Ethyl Ketone (MEK)
   TLV (mg/m3): 589.78
   Maximum Hourly Emission Rate (lbs/hr): 1.08 (total project)
   Predicted 1-Hour Maximum Ground-Level Concentration (g/m3): 1085.17
   MAGLC (g/m3): 14042.26

   b. Pollutant: 2-Butoxyethanol (EGBE)
   TLV (mg/m3): 96.66
   Maximum Hourly Emission Rate (lbs/hr): 0.49 (total project)
   Predicted 1-Hour Maximum Ground-Level Concentration (g/m3): 490.8
   MAGLC (g/m3): 2301.49

   c. Pollutant: Butanol
   TLV (mg/m3): 60.63
   Maximum Hourly Emission Rate (lbs/hr): 1.22 (total project)
   Predicted 1-Hour Maximum Ground-Level Concentration (g/m3): 1223.0
   MAGLC (g/m3): 1443.57

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

   a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a compound or chemical with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled, as documented in the most current version of the American Conference of Governmental Industrial Hygienists' (ACGIH's) handbook entitled "TLVs and BEIs" ("Threshold Limit Values for Chemical Substances and Physical Agents, Biological Exposure Indices");

   b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and

   c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).
   If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 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) meet(s) the definition of a "modification" under other provisions of the rule, then the permittee shall obtain a final permit to install prior to the change.

5. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will 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 the evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and

   c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

D. **Reporting Requirements**

1. The permittee shall submit deviation (excursion) reports that include the following information:

   a. an identification of each month during which the average hourly OC emissions (excluding nonphotochemically reactive exempt solvents) from all coatings and cleanup materials exceeded 0.81 pound per hour. This report shall include the actual average hourly OC emissions, an identification of the probable cause for such deviation, and a description of any corrective actions or preventative measures which have been, or will be, taken to correct the occurrence and prevent reoccurrence; and

   b. an identification of each month during which the daily OC emissions (excluding nonphotochemically reactive exempt solvents) from all coatings and cleanup materials exceeded 16.2 pounds per day. This report shall include the actual average daily OC emissions, an identification of the probable cause for such deviation, and a description of any corrective actions or preventative measures which have been, or will be, taken to correct the occurrence and prevent reoccurrence.

These reports shall be submitted to the Cleveland Division of Air Quality (Cleveland DAQ) within 30 days following the end of the calendar month during which they were identified.

2. The permittee shall submit to the Cleveland DAQ an annual emissions report including the annual OC emissions (excluding nonphotochemically reactive exempt solvents) for this emissions unit. This report shall be submitted by January 31 of each calendar year.

E. **Testing Requirements**

1. Compliance with the emission limitation(s) and operational restriction specified in Section A.1 of these terms and conditions shall be determined in accordance with the following method(s):

a. Emission Limitation:
16.2 lbs OC/ day (excluding nonphotochemically reactive exempt solvents)

Applicable Compliance Method:
This emission limitation is based upon the unit's potential to emit. The potential to emit calculations, as shown in the following equations, were derived using company-specified process data.

Extrapolating Factors To Determine Maximum Material Usage (based on inherent limitations)

Adjustment = [(maximum process line speed) / (average process line speed based on CY-2001 production figures)] * [(Potential Annual Facility Hours, 7300) / (Annual Operational Hours, 6000 hours based on CY-2001 data)]

Adjustment Factor = [(40 ft / min) / (23 ft / min)] * [(7300 hrs / yr) / (6000 hrs / yr)]

Adjustment Factor = 2.12
Note: The facility has an inherent physical limitation in the production of their product. This is the result of the mandatory time necessary to change rolls and preventative maintenance to keep the process running smoothly. Since roll size varies, an average product roll size was used to calculate this limitation. Average roll size is 6000 ft, maximum machine process capacity = 40 ft/min, average machine process capacity = 23 ft/min, average time required to change roll (remove, label, bring new, thread components, connect, adjust settings, etc.) is 30 minutes changeover. Based on this, it takes 150 minutes to produce a roll and 30 minutes to change over so maximum time to fully produce a roll is 180 minutes. There are 1440 minutes / day and 1 roll is processed in 180 minutes so there is a limitation of 8 rolls produced per day @ 6000 ft (or 48000 ft/day). Since maximum capacity is 40 fpm (57600 ft/day) but limitations are imposed at 48000 ft/day; then the facility's maximum run hours is limited to 0.833 * 24 hrs/day (20.0 hrs/day, 7300 hrs/yr).

Potential Material Usage
Theoretical Annual Organic Material Usage = (CY-2001 organic material usage figures) * (Adjustment Factor)

Theoretical Annual Organic Material Usage = (2789 pounds/yr) * (2.12) = 5913 pounds/yr

Potential Emissions
Theoretical Annual OC Emissions = (Theoretical Annual Organic Material Usage) * (organic material content, set at 100% by weight)

Theoretical Annual OC Emissions = (5913 pounds/yr) * (100%) * (1 ton / 2000 pounds) = 2.96 tpy

Daily OC Emissions (lb/day) = (Theoretical Annual OC Emissions) / (365 days/yr)

Daily OC Emissions (lb/day) = [(5913 pounds/yr) / (365 days/yr)] = 16.2 pounds/day

Hourly OC Emissions (lb/hr) = (Daily OC Emissions) / (20 hrs/day)

Hourly OC Emissions (lb/hr) = [(16.2 pounds/day) / (20 hrs/day)] = 0.81 pound/hr
b. Emission Limitation:
2.96 tpy OC (excluding nonphotochemically reactive exempt solvents)

Applicable Compliance Method:
This emission limitation is based upon the unit's potential to emit. The potential to emit calculations, as shown in section E.1.a, were derived using company-specified process data.

c. Emission Limitation:
0.81 lb OC/ hr (excluding nonphotochemically reactive exempt solvents)

Applicable Compliance Method:
This emission limitation is based upon the unit's potential to emit. The potential to emit calculations, as shown in section E.1.a, were derived using company-specified process data.

2. Formulation data or USEPA Method 24 (40 CFR Part 60, Appendix A) shall be used to determine the OC contents of the coatings. Formulation data shall be used to determine the OC contents of the cleanup materials. The Cleveland DAQ may require that USEPA Method 24 be used to determine the OC content of the coatings. If an owner or operator determines that Method 24 cannot be used for a particular coating, the permittee shall so notify the administrator of the USEPA and shall use formulation data for that coating to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24.

F. **Miscellaneous Requirements**

1. None

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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.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P010- Glenro CHOICE Machine G1 (enamel and silicone line: heat cured, revised water based coatings)	OAC rule 3745-31-05(A)(3) (PTI 13-04208 issued 3/28/06)	Organic compound (OC) emissions for this emissions unit shall not exceed 0.81 pound per hour, 16.2 pounds per day, and 2.96 tons per year, not including nonphotochemically reactive exempt solvents. See A.2.a and A.2.b below.
	OAC rule 3745-21-07(G)(2)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. **Additional Terms and Conditions**

   (a) The short term and annual OC emission limitations are based on the emission units' potential to emit. Therefore, daily record keeping or reporting is not required to demonstrate compliance with these limits. On days when photochemically reactive materials (coatings and/or cleanup) are employed, any emissions from nonphotochemically reactive exempt solvents shall not be included towards the OC limit since nonphotochemically reactive exempt solvents are not photochemically reactive per OAC rule 3745-21-07(G)(9)(f), OAC rule 3745-21-01(B)(6), and OAC rule 3745-21-01(C)(5).

B. **Operational Restrictions**

1. None

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

1. The permittee shall collect and record the following information each month for this emissions unit:

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

   b. the OC content (excluding nonphotochemically reactive exempt solvents) of each coating, in pounds per gallon or pounds per pound, as employed;

   c. the amount, in gallons or pounds, of each coating employed;

   d. the name and identification number of each cleanup material employed;

   e. the OC content (excluding nonphotochemically reactive exempt solvents) of each cleanup material employed, in pounds per gallon or pounds per pound;

   f. the amount, in gallons or pounds, of each cleanup material employed;

   g. the total amount of cleanup material taken off-site, in gallons or pounds;

   h. the total OC emissions from cleanup material in pounds per month, calculated as the summation of { [e x (f - g)] x 1.0 (AP-42 factor, assuming 100% evaporative loss) } for all cleanup materials;

   i. the total OC emissions (excluding nonphotochemically reactive exempt solvents) from all coatings, in pounds per month, calculated as the summation of [(b x c) x 1.0 (AP-42 factor, assuming 100% evaporative loss)] for all coatings;

   j. the total number of days this emissions unit was in operation during the month;

   k. the average daily OC emissions (excluding nonphotochemically reactive exempt solvents), in pounds per day, calculated as [(h + i) / j];

   l. the total monthly OC emissions (excluding nonphotochemically reactive exempt solvents), in pounds per month, calculated as the summation of (h + i);

   m. the actual hours of operation for this emissions unit per month; and

n. the average hourly OC emissions (excluding nonphotochemically reactive exempt solvents), in pounds per hour, calculated as (l / m).
Notes: 1) The OC emissions (excluding nonphotochemically reactive exempt solvents) are based on the emissions units theoretical PTE based on the existing coating and cleanup materials. Provided the chemical constituents for these materials remains similar to the current make-up, the specified emissions limits should not be exceeded.

2) The coating information must be for the coatings as employed, including any thinning solvents added at the emissions unit. Definitions of "photochemically reactive" and "nonphotochemically reactive" are based upon OAC rule 3745-21-01(C)(5). The definitions of "VOC" as used in this documentation refers to "non-exempt, photochemically reactive material" as found in "An Explanation of Ohio Air Pollution Hydrocarbon Regulations" originally published June 29, 1972 and republished October 6, 2000 as approved by the Ohio EPA for technical guidance.

2. The permittee shall collect and record the annual OC emissions (excluding nonphotochemically reactive exempt solvents) from all coatings and cleanup materials, in pounds or tons per year, as the sum of monthly emissions over the 12 month calendar period (sum of C.1.l above over the calendar year).

3. The permit to install for this emissions unit [P010] was evaluated based on the actual 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 to this emissions unit for each toxic pollutant, using data from the permit to install application, and modeling was performed for the toxic pollutant(s) emitted at over a ton per year using the SCREEN 3.0 model or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the use of the SCREEN 3.0 (or other approved) model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as required in Engineering Guide #70. The following summarizes the results of the modeling for the "worst case" pollutant(s):

a. Pollutant: Methyl Ethyl Ketone (MEK)
TLV (mg/m3): 589.78
Maximum Hourly Emission Rate (lbs/hr): 1.08 (total project)
Predicted 1-Hour Maximum Ground-Level Concentration (g/m3): 1085.17
MAGLC (g/m3): 14042.26

b. Pollutant: 2-Butoxyethanol (EGBE)
TLV (mg/m3): 96.66
Maximum Hourly Emission Rate (lbs/hr): 0.49 (total project)
Predicted 1-Hour Maximum Ground-Level Concentration (g/m3): 490.8
MAGLC (g/m3): 2301.49

c. Pollutant: Butanol
TLV (mg/m3): 60.63
Maximum Hourly Emission Rate (lbs/hr): 1.22 (total project)
Predicted 1-Hour Maximum Ground-Level Concentration (g/m3): 1223.0
MAGLC (g/m3): 1443.57

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

a.changes in the composition of the materials used or the use of new materials, that would result in the emission of a compound or chemical with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled, as documented in the most current version of the American Conference of Governmental Industrial Hygienists' (ACGIH's) handbook entitled "TLVs and BEIs" ("Threshold Limit Values for Chemical Substances and Physical Agents, Biological Exposure Indices");

b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and

c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).
If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 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) meet(s) the definition of a "modification" under other provisions of the rule, then the permittee shall obtain a final permit to install prior to the change.

5. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will 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 the evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and

c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

D. **Reporting Requirements**

1. The permittee shall submit deviation (excursion) reports that include the following information:

a. an identification of each month during which the average hourly OC emissions (excluding nonphotochemically reactive exempt solvents) from all coatings and cleanup materials exceeded 0.81 pound per hour. This report shall include the actual average hourly OC emissions, an identification of the probable cause for such deviation, and a description of any corrective actions or preventative measures which have been, or will be, taken to correct the occurrence and prevent reoccurrence; and

b. an identification of each month during which the daily OC emissions (excluding nonphotochemically reactive exempt solvents) from all coatings and cleanup materials exceeded 16.2 pounds per day. This report shall include the actual average daily OC emissions, an identification of the probable cause for such deviation, and a description of any corrective actions or preventative measures which have been, or will be, taken to correct the occurrence and prevent reoccurrence.

These reports shall be submitted to the Cleveland Division of Air Quality (Cleveland DAQ) within 30 days following the end of the calendar month during which they were identified.

2. The permittee shall submit to the Cleveland DAQ an annual emissions report including the annual OC emissions (excluding nonphotochemically reactive exempt solvents) for this emissions unit. This report shall be submitted by January 31 of each calendar year.

E. **Testing Requirements**

1. Compliance with the emission limitation(s) and operational restriction specified in Section A.1 of these terms and conditions shall be determined in accordance with the following method(s):

a. Emission Limitation:
16.2 lbs OC/ day (excluding nonphotochemically reactive exempt solvents)

Applicable Compliance Method:
This emission limitation is based upon the unit's potential to emit. The potential to emit calculations, as shown in the following equations, were derived using company-specified process data.

Extrapolating Factors To Determine Maximum Material Usage (based on inherent limitations)

Adjustment = [(maximum process line speed) / (average process line speed based on CY-2001 production figures)] * [(Potential Annual Facility Hours, 7300) / (Annual Operational Hours, 6000 hours based on CY-2001 data)]

Adjustment Factor = [(40 ft / min) / (23 ft / min)] * [(7300 hrs / yr) / (6000 hrs / yr)]

Adjustment Factor = 2.12
Note: The facility has an inherent physical limitation in the production of their product. This is the result of the mandatory time necessary to change rolls and preventative maintenance to keep the process running smoothly. Since roll size varies, an average product roll size was used to calculate this limitation. Average roll size is 6000 ft, maximum machine process capacity = 40 ft/min, average machine process capacity = 23 ft/min, average time required to change roll (remove, label, bring new, thread components, connect, adjust settings, etc.) is 30 minutes changeover. Based on this, it takes 150 minutes to produce a roll and 30 minutes to change over so maximum time to fully produce a roll is 180 minutes. There are 1440 minutes / day and 1 roll is processed in 180 minutes so there is a limitation of 8 rolls produced per day @ 6000 ft (or 48000 ft/day). Since maximum capacity is 40 fpm (57600 ft/day) but limitations are imposed at 48000 ft/day; then the facility's maximum run hours is limited to 0.833 * 24 hrs/day (20.0 hrs/day, 7300 hrs/yr).

Potential Material Usage
Theoretical Annual Organic Material Usage = (CY-2001 organic material usage figures) * (Adjustment Factor)

Theoretical Annual Organic Material Usage = (2789 pounds/yr) * (2.12) = 5913 pounds/yr

Potential Emissions
Theoretical Annual OC Emissions = (Theoretical Annual Organic Material Usage) * (organic material content, set at 100% by weight)

Theoretical Annual OC Emissions = (5913 pounds/yr) * (100%) * (1 ton / 2000 pounds) = 2.96 tpy

Daily OC Emissions (lb/day) = (Theoretical Annual OC Emissions) / (365 days/yr)

Daily OC Emissions (lb/day) = [(5913 pounds/yr) / (365 days/yr)] = 16.2 pounds/day

Hourly OC Emissions (lb/hr) = (Daily OC Emissions) / (20 hrs/day)

Hourly OC Emissions (lb/hr) = [(16.2 pounds/day) / (20 hrs/day)] = 0.81 pound/hr
b. Emission Limitation:
2.96 tpy OC (excluding nonphotochemically reactive exempt solvents)

Applicable Compliance Method:
This emission limitation is based upon the unit's potential to emit. The potential to emit calculations, as shown in section E.1.a, were derived using company-specified process data.

c. Emission Limitation:
0.81 lb OC/ hr (excluding nonphotochemically reactive exempt solvents)

Applicable Compliance Method:
This emission limitation is based upon the unit's potential to emit. The potential to emit calculations, as shown in section E.1.a, were derived using company-specified process data.

2. Formulation data or USEPA Method 24 (40 CFR Part 60, Appendix A) shall be used to determine the OC contents of the coatings. Formulation data shall be used to determine the OC contents of the cleanup materials. The Cleveland DAQ may require that USEPA Method 24 be used to determine the OC content of the coatings. If an

owner or operator determines that Method 24 cannot be used for a particular coating, the permittee shall so notify the administrator of the USEPA and shall use formulation data for that coating to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24.

F. **Miscellaneous Requirements**

1. None

Facility ID: 1318200471 Emissions Unit ID: P011 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.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P011- Glenro CHOICE Machine G1 (enamel and silicone line: heat cured, revised water based coatings)	OAC rule 3745-31-05(A)(3) (PTI 13-04208 issued 3/28/06)	Organic compound (OC) emissions for this emissions unit shall not exceed 0.81 pound per hour, 16.2 pounds per day, and 2.96 tons per year, not including nonphotochemically reactive exempt solvents. See A.2.a and A.2.b below.
	OAC rule 3745-21-07(G)(2)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. **Additional Terms and Conditions**

(a) The short term and annual OC emission limitations are based on the emission units' potential to emit. Therefore, daily record keeping or reporting is not required to demonstrate compliance with these limits. On days when photochemically reactive materials (coatings and/or cleanup) are employed, any emissions from nonphotochemically reactive exempt solvents shall not be included towards the OC limit since nonphotochemically reactive exempt solvents are not photochemically reactive per OAC rule 3745-21-07(G)(9)(f), OAC rule 3745-21-01(B)(6), and OAC rule 3745-21-01(C)(5).

B. **Operational Restrictions**

1. None

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

1. The permittee shall collect and record the following information each month for this emissions unit:

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

b. the OC content (excluding nonphotochemically reactive exempt solvents) of each coating, in pounds per gallon or pounds per pound, as employed;

c. the amount, in gallons or pounds, of each coating employed;

d. the name and identification number of each cleanup material employed;

e. the OC content (excluding nonphotochemically reactive exempt solvents) of each cleanup material employed, in pounds per gallon or pounds per pound;

f. the amount, in gallons or pounds, of each cleanup material employed;

g. the total amount of cleanup material taken off-site, in gallons or pounds;

h. the total OC emissions from cleanup material in pounds per month, calculated as the summation of { [e x (f - g)] x 1.0 (AP-42 factor, assuming 100% evaporative loss) } for all cleanup materials;

i. the total OC emissions (excluding nonphotochemically reactive exempt solvents) from all coatings, in pounds per month, calculated as the summation of [(b x c) x 1.0 (AP-42 factor, assuming 100% evaporative loss)] for all coatings;

j. the total number of days this emissions unit was in operation during the month;

k. the average daily OC emissions (excluding nonphotochemically reactive exempt solvents), in pounds per day, calculated as [(h + i) / j];

l. the total monthly OC emissions (excluding nonphotochemically reactive exempt solvents), in pounds per month, calculated as the summation of (h + i);

m. the actual hours of operation for this emissions unit per month; and

n. the average hourly OC emissions (excluding nonphotochemically reactive exempt solvents), in pounds per hour, calculated as (l / m).
Notes: 1) The OC emissions (excluding nonphotochemically reactive exempt solvents) are based on the emissions units theoretical PTE based on the existing coating and cleanup materials. Provided the chemical constituents for these materials remains similar to the current make-up, the specified emissions limits should not be exceeded.

2) The coating information must be for the coatings as employed, including any thinning solvents added at the emissions unit. Definitions of "photochemically reactive" and "nonphotochemically reactive" are based upon OAC rule 3745-21-01(C)(5). The definitions of "VOC" as used in this documentation refers to "non-exempt, photochemically reactive material" as found in "An Explanation of Ohio Air Pollution Hydrocarbon Regulations" originally published June 29, 1972 and republished October 6, 2000 as approved by the Ohio EPA for technical guidance.

2. The permittee shall collect and record the annual OC emissions (excluding nonphotochemically reactive exempt solvents) from all coatings and cleanup materials, in pounds or tons per year, as the sum of monthly emissions over the 12 month calendar period (sum of C.1.l above over the calendar year).

3. The permit to install for this emissions unit [P011] was evaluated based on the actual 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 to this emissions unit for each toxic pollutant, using data from the permit to install application, and modeling was performed for the toxic pollutant(s) emitted at over a ton per year using the SCREEN 3.0 model or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the use of the SCREEN 3.0 (or other approved) model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as required in Engineering Guide #70. The following summarizes the results of the modeling for the "worst case" pollutant(s):

a. Pollutant: Methyl Ethyl Ketone (MEK)
TLV (mg/m3): 589.78
Maximum Hourly Emission Rate (lbs/hr): 1.08 (total project)
Predicted 1-Hour Maximum Ground-Level Concentration (g/m3): 1085.17
MAGLC (g/m3): 14042.26

b. Pollutant: 2-Butoxyethanol (EGBE)
TLV (mg/m3): 96.66
Maximum Hourly Emission Rate (lbs/hr): 0.49 (total project)
Predicted 1-Hour Maximum Ground-Level Concentration (g/m3): 490.8
MAGLC (g/m3): 2301.49

c. Pollutant: Butanol
TLV (mg/m3): 60.63
Maximum Hourly Emission Rate (lbs/hr): 1.22 (total project)
Predicted 1-Hour Maximum Ground-Level Concentration (g/m3): 1223.0
MAGLC (g/m3): 1443.57

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

a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a compound or chemical with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled, as documented in the most current version of the American Conference of Governmental Industrial Hygienists' (ACGIH's) handbook entitled "TLVs and BEIs" ("Threshold Limit Values for Chemical Substances and Physical Agents, Biological Exposure Indices");

b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and

c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).
If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 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) meet(s) the definition of a "modification" under other provisions of the rule, then the permittee shall obtain a final permit to install prior to the change.

5. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will 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 the evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and

   c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

D. **Reporting Requirements**

1. The permittee shall submit deviation (excursion) reports that include the following information:

   a. an identification of each month during which the average hourly OC emissions (excluding nonphotochemically reactive exempt solvents) from all coatings and cleanup materials exceeded 0.81 pound per hour. This report shall include the actual average hourly OC emissions, an identification of the probable cause for such deviation, and a description of any corrective actions or preventative measures which have been, or will be, taken to correct the occurrence and prevent reoccurrence; and

   b. an identification of each month during which the daily OC emissions (excluding nonphotochemically reactive exempt solvents) from all coatings and cleanup materials exceeded 16.2 pounds per day. This report shall include the actual average daily OC emissions, an identification of the probable cause for such deviation, and a description of any corrective actions or preventative measures which have been, or will be, taken to correct the occurrence and prevent reoccurrence.

   These reports shall be submitted to the Cleveland Division of Air Quality (Cleveland DAQ) within 30 days following the end of the calendar month during which they were identified.

2. The permittee shall submit to the Cleveland DAQ an annual emissions report including the annual OC emissions (excluding nonphotochemically reactive exempt solvents) for this emissions unit. This report shall be submitted by January 31 of each calendar year.

E. **Testing Requirements**

1. Compliance with the emission limitation(s) and operational restriction specified in Section A.1 of these terms and conditions shall be determined in accordance with the following method(s):

   a. Emission Limitation:
   16.2 lbs OC/ day (excluding nonphotochemically reactive exempt solvents)

   Applicable Compliance Method:
   This emission limitation is based upon the unit's potential to emit. The potential to emit calculations, as shown in the following equations, were derived using company-specified process data.

   Extrapolating Factors To Determine Maximum Material Usage (based on inherent limitations)

   Adjustment = [(maximum process line speed) / (average process line speed based on CY-2001 production figures)] * [(Potential Annual Facility Hours, 7300) / (Annual Operational Hours, 6000 hours based on CY-2001 data)]

   Adjustment Factor = [(40 ft / min) / (23 ft / min)] * [(7300 hrs / yr) / (6000 hrs / yr)]

   Adjustment Factor = 2.12
   Note: The facility has an inherent physical limitation in the production of their product. This is the result of the mandatory time necessary to change rolls and preventative maintenance to keep the process running smoothly. Since roll size varies, an average product roll size was used to calculate this limitation. Average roll size is 6000 ft, maximum machine process capacity = 40 ft/min, average machine process capacity = 23 ft/min, average time required to change roll (remove, label, bring new, thread components, connect, adjust settings, etc.) is 30 minutes changeover. Based on this, it takes 150 minutes to produce a roll and 30 minutes to change over so maximum time to fully produce a roll is 180 minutes. There are 1440 minutes / day and 1 roll is processed in 180 minutes so there is a limitation of 8 rolls produced per day @ 6000 ft (or 48000 ft/day). Since maximum capacity is 40 fpm (57600 ft/day) but limitations are imposed at 48000 ft/day; then the facility's maximum run hours is limited to 0.833 * 24 hrs/day (20.0 hrs/day, 7300 hrs/yr).

   Potential Material Usage
   Theoretical Annual Organic Material Usage = (CY-2001 organic material usage figures) * (Adjustment Factor)

   Theoretical Annual Organic Material Usage = (2789 pounds/yr) * (2.12) = 5913 pounds/yr

   Potential Emissions
   Theoretical Annual OC Emissions = (Theoretical Annual Organic Material Usage) * (organic material content, set at 100% by weight)

   Theoretical Annual OC Emissions = (5913 pounds/yr) * (100%) * (1 ton / 2000 pounds) = 2.96 tpy

   Daily OC Emissions (lb/day) = (Theoretical Annual OC Emissions) / (365 days/yr)

   Daily OC Emissions (lb/day) = [(5913 pounds/yr) / (365 days/yr)] = 16.2 pounds/day

   Hourly OC Emissions (lb/hr) = (Daily OC Emissions) / (20 hrs/day)

   Hourly OC Emissions (lb/hr) = [(16.2 pounds/day) / (20 hrs/day)] = 0.81 pound/hr
   b. Emission Limitation:
   2.96 tpy OC (excluding nonphotochemically reactive exempt solvents)

Applicable Compliance Method:
This emission limitation is based upon the unit's potential to emit. The potential to emit calculations, as shown in section E.1.a, were derived using company-specified process data.

c. Emission Limitation:
0.81 lb OC/ hr (excluding nonphotochemically reactive exempt solvents)

Applicable Compliance Method:
This emission limitation is based upon the unit's potential to emit. The potential to emit calculations, as shown in section E.1.a, were derived using company-specified process data.

2. Formulation data or USEPA Method 24 (40 CFR Part 60, Appendix A) shall be used to determine the OC contents of the coatings. Formulation data shall be used to determine the OC contents of the cleanup materials. The Cleveland DAQ may require that USEPA Method 24 be used to determine the OC content of the coatings. If an owner or operator determines that Method 24 cannot be used for a particular coating, the permittee shall so notify the administrator of the USEPA and shall use formulation data for that coating to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24.

F. **Miscellaneous Requirements**

1. None

Facility ID: 1318200471 Emissions Unit ID: P012 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.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P012 - 24-Carrier Braider #2 (enamel line, heat cured, revised water based coatings).	OAC rule 3745-31-05(A)(3) (PTI 13-04208 issued 3/28/06)	Organic compound (OC) emissions for this emissions unit shall not exceed 0.43 pound per hour, 9.82 pounds per day, and 1.79 tons per year, not including nonphotochemically reactive exempt solvents. See A.2.a below.
	OAC rule 3745-21-07(G)(2)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. **Additional Terms and Conditions**

(a) The short term and annual OC emission limitations are based on the emission units' potential to emit. Therefore, daily record keeping or reporting is not required to demonstrate compliance with these limits.

B. **Operational Restrictions**

1. None

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

1. The permittee shall collect and record the following information each month for this emissions unit:

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

b. the OC content (excluding nonphotochemically reactive exempt solvents) of each coating, in pounds per gallon or pounds per pound, as employed;

c. the amount, in gallons or pounds, of each coating employed;

d. the name and identification number of each cleanup material employed;

e. the OC content (excluding nonphotochemically reactive exempt solvents) of each cleanup material employed, in pounds per gallon or pounds per pound;

f. the amount, in gallons or pounds, of each cleanup material employed;

g. the total amount of cleanup material taken off-site, in gallons or pounds;

h. the total OC emissions (excluding nonphotochemically reactive exempt solvents) from cleanup material in pounds per month, calculated as the summation of { [e x (f - g)] x 1.0 (AP-42 factor, assuming 100% evaporative loss) } for all cleanup materials;

i. the total OC emissions (excluding nonphotochemically reactive exempt solvents) from all coatings, in pounds per month, calculated as the summation of [(b x c) x 1.0 (AP-42 factor, assuming 100% evaporative loss)] for all coatings;

j. the total number of days this emissions unit was in operation during the month;

k. the average daily OC emissions (excluding nonphotochemically reactive exempt solvents), in pounds per day, calculated as [(h + i) / j];

l. the total monthly OC emissions (excluding nonphotochemically reactive exempt solvents), in pounds per month, calculated as the summation of (h + i);

m. the actual hours of operation for this emissions unit per month; and

n. the average hourly OC emissions (excluding nonphotochemically reactive exempt solvents), in pounds per hour, calculated as (l / m).
Notes: 1) The OC emissions (excluding nonphotochemically reactive exempt solvents) are based on the emissions units theoretical PTE based on the existing coating and cleanup materials. Provided the chemical constituents for these materials remains similar to the current make-up, the specified emissions limits should not be exceeded.

2) The coating information must be for the coatings as employed, including any thinning solvents added at the emissions unit. Definitions of "photochemically reactive" and "nonphotochemically reactive" are based upon OAC rule 3745-21-01(C)(5). The definitions of "VOC" as used in this documentation refers to "non-exempt, photochemically reactive material" as found in "An Explanation of Ohio Air Pollution Hydrocarbon Regulations" originally published June 29, 1972 and republished October 6, 2000 as approved by the Ohio EPA for technical guidance.

2. The permittee shall collect and record the annual OC emissions (excluding nonphotochemically reactive exempt solvents) from all coatings and cleanup materials, in pounds or tons per year, as the sum of monthly emissions over the 12 month calendar period (sum of C.1.l above over the calendar year).

3. The permit to install for this emissions unit [P012] was evaluated based on the actual 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 to this emissions unit for each toxic pollutant, using data from the permit to install application, and modeling was performed for the toxic pollutant(s) emitted at over a ton per year using the SCREEN 3.0 model or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the use of the SCREEN 3.0 (or other approved) model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as required in Engineering Guide #70. The following summarizes the results of the modeling for the "worst case" pollutant(s):

a. Pollutant: Methyl Ethyl Ketone (MEK)
TLV (mg/m3): 589.78
Maximum Hourly Emission Rate (lbs/hr): 1.08 (total project)
Predicted 1-Hour Maximum Ground-Level Concentration (g/m3): 1085.17
MAGLC (g/m3): 14042.26

b. Pollutant: 2-Butoxyethanol (EGBE)
TLV (mg/m3): 96.66
Maximum Hourly Emission Rate (lbs/hr): 0.49 (total project)
Predicted 1-Hour Maximum Ground-Level Concentration (g/m3): 490.8
MAGLC (g/m3): 2301.49

c. Pollutant: Butanol
TLV (mg/m3): 60.63
Maximum Hourly Emission Rate (lbs/hr): 1.22 (total project)
Predicted 1-Hour Maximum Ground-Level Concentration (g/m3): 1223.0
MAGLC (g/m3): 1443.57

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

a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a compound or chemical with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled, as documented in the most current version of the American Conference of Governmental Industrial Hygienists' (ACGIH's) handbook entitled "TLVs and BEIs" ("Threshold Limit Values for Chemical Substances and Physical Agents, Biological Exposure Indices");

b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and

c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).
If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 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) meet(s) the definition of a "modification" under other provisions of the rule, then the permittee shall obtain a final permit to install prior to the change.

5. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will 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 the evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and

c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

D. **Reporting Requirements**

1. The permittee shall submit deviation (excursion) reports that include the following information:

a. an identification of each month during which the average hourly OC emissions (excluding nonphotochemically reactive exempt solvents) from all coatings and cleanup materials exceeded 0.43 pound per hour. This report shall include the actual average hourly OC emissions, an identification of the probable cause for such deviation, and a description of any corrective actions or preventative measures which have been, or will be, taken to correct the occurrence and prevent reoccurrence; and

b. an identification of each month during which the daily OC emissions (excluding nonphotochemically reactive exempt solvents) from all coatings and cleanup materials exceeded 9.82 pounds per day. This report shall include the actual average daily OC emissions, an identification of the probable cause for such deviation, and a description of any corrective actions or preventative measures which have been, or will be, taken to correct the occurrence and prevent reoccurrence.

These reports shall be submitted to the Cleveland Division of Air Quality (Cleveland DAQ) within 30 days following the end of the calendar month during which they were identified.

2. The permittee shall submit to the Cleveland DAQ an annual emissions report including the annual OC emissions (excluding nonphotochemically reactive exempt solvents) for this emissions unit. This report shall be submitted by January 31 of each calendar year.

E. **Testing Requirements**

1. Compliance with the emission limitation(s) and operational restriction specified in Section A.1 of these terms and conditions shall be determined in accordance with the following method(s):

a. Emission Limitation:
9.82 lbs OC/day (excluding nonphotochemically reactive exempt solvents)

Applicable Compliance Method:
This emission limitation is based upon the unit's potential to emit. The potential to emit calculations, as shown in the following equations, were derived using company-specified process data.

Extrapolating Factors To Determine Maximum Material Usage (based on inherent limitations)

Adjustment = [(maximum process line speed) / (average process line speed based on CY-2001 production figures)] * [(Potential Annual Facility Hours, 8395) / (Annual Operational Hours, 6000 hours based on CY-2001 data)]

Adjustment Factor = [(300 ft /hour) / (300 ft / hour)] * [(8395 hrs / yr) / (6000 hrs / yr)]

Adjustment Factor = 1.4
Note: The facility has an inherent physical limitation in the production of their product. This is the result of the mandatory time necessary to change rolls and preventative maintenance to keep the process running smoothly. Since roll size varies, an average product roll size was used to calculate this limitation. Average roll size is 6000 ft, maximum machine process capacity = 300 ft/hr, average machine process capacity = 300 ft/hr (set rate), average time required to change roll (remove, label, bring new, thread components, connect, adjust settings, etc.) is 60 minutes changeover. Based on this, it takes 1200 minutes to produce a roll and 60 minutes to change over so maximum time to fully produce a roll is 1260 minutes. There are 1440 minutes / day and 1 roll is processed in 1260 minutes so there is a limitation of 1.15 rolls produced per day @ 6000 ft (or 6900 ft/day). Since maximum capacity is 300 ft/hr (7200 ft/day) but limitations are imposed at 6900 ft/day; then the facility's maximum run hours is limited to 0.96 * 24 hrs/day (23.0 hrs/day, 8395 hrs/yr).

Potential Material Usage
Theoretical Annual Organic Material Usage = (CY-2001 organic material usage figures) * (Adjustment Factor)

Theoretical Annual Organic Material Usage = (2560 pounds/yr) * (1.4) = 3584 pounds/yr

Potential Emissions
Theoretical Annual OC Emissions = (Theoretical Annual Organic Material Usage) * (organic material content, set at 100% by weight)

Theoretical Annual OC Emissions = (3584 pounds/yr) * (100%) * (1 ton / 2000 pounds) = 1.79 tpy

Daily OC Emissions (lb/day) = (Theoretical Annual OC Emissions) / (365 days/yr)

Daily OC Emissions (lb/day) = [(3584 pounds/yr) / (365 days/yr)] = 9.82 pounds/day

Hourly OC Emissions (lb/hr) = (Daily OC Emissions) / (23 hrs/day)

Hourly OC Emissions (lb/hr) = [(9.82 pounds/day) / (23 hrs/day)] = 0.43 lbs/hr.
b. Emission Limitation:
1.79 tpy OC (excluding nonphotochemically reactive exempt solvents)

Applicable Compliance Method:
This emission limitation is based upon the unit's potential to emit. The potential to emit calculations, as shown in section E.1.a, were derived using company-specified process data.

c. Emission Limitation:
0.43 lb OC/hour (excluding nonphotochemically reactive exempt solvents)

Applicable Compliance Method:
This emission limitation is based upon the unit's potential to emit. The potential to emit calculations, as shown in section E.1.a, were derived using company-specified process data.

2. Formulation data or USEPA Method 24 (40 CFR Part 60, Appendix A) shall be used to determine the OC contents of the coatings. Formulation data shall be used to determine the OC contents of the cleanup materials. The Cleveland Division of Air Quality (Cleveland DAQ) may require that USEPA Method 24 be used to determine the OC content of the coatings. If an owner or operator determines that Method 24 cannot be used for a particular coating, the permittee shall so notify the administrator of the USEPA and shall use formulation data for that coating to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24.

F. **Miscellaneous Requirements**

1. None