State of Ohio Environmental Protection Agency

Street Address:
122 S. Front Street

Lazarus Gov. Center **TELE:** (614) 644-3020 **FAX:** (614) 644-2329

Mailing Address:
Lazarus Gov. Center
P.O. Box 1049

RE: FINAL PERMIT TO INSTALL MODIFICATION **CERTIFIED MAIL**
CUYAHOGA COUNTY

Application No: 13-04208
Fac ID: 1318200471
DATE: 3/28/2006

Radix Wire Company
Tim Esson
26260 Lakeland Blvd
Euclid, OH 44132

Enclosed Please find a modification to the Ohio EPA Permit To Install referenced above which will modify the terms and conditions.

You are hereby notified that this action by the Director is final and may be appealed to the Ohio Environmental Review Appeals Commission pursuant to Chapter 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. It must be filed within thirty (30) days after the notice of the Directors action. A copy of the appeal must be served on the Director of the Ohio Environmental Protection Agency within three (3) days of filing with the Commission. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
309 South Fourth Street, Room 222
Columbus, Ohio 43215

Sincerely,

Michael W. Ahern

Michael W. Ahern, Manager
Permit Issuance and Data Management Section
Division of Air Pollution Control

CC: **USEPA** **CLAA**

OhioEPA

STATE OF OHIO ENVIRONMENTAL PROTECTION AGENCY

Permit To Install **Issue Date: 3/28/2006**
Terms and Conditions **Effective Date: 3/28/2006**

FINAL ADMINISTRATIVE MODIFICATION OF PERMIT TO INSTALL 13-04208

Application Number: 13-04208
Facility ID: 1318200471
Permit Fee: **$0**
Name of Facility: Radix Wire Company
Person to Contact: Tim Esson
Address: 26260 Lakeland Blvd
Euclid, OH 44132

Location of proposed air contaminant source(s) [emissions unit(s)]:
26260 Lakeland Blvd
Euclid, **Ohio**

Description of proposed emissions unit(s):
Administrative Modification to correct typographical errors.

The above named entity is hereby granted a modification to the permit to install described above pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this modification does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the above described source(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans included in the application, the above described source(s) of pollutants will be granted the necessary operating permits.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Director

Part I - GENERAL TERMS AND CONDITIONS

A. Permit to Install General Terms and Conditions

1. Compliance Requirements

The emissions unit(s) identified in this Permit to Install shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.

2. Reporting Requirements

The permittee shall submit required reports in the following manner:

a. Reports of any required monitoring and/or recordkeeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.

b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

3. Records Retention Requirements

Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

4. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon

the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

5. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s).

6. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

7. Air Pollution Nuisance

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

8. Termination of Permit to Install

This Permit to Install shall terminate within eighteen months of the effective date of the Permit to Install if the owner or operator has not undertaken a continuing program of installation or modification or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation or modification. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

9. Construction of New Sources(s)

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

If the construction of the proposed emissions unit(s) has already begun or has been completed prior to the date the Director of the Environmental Protection Agency approves the permit application and plans, the approval does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the approved plans. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of the Permit to Install does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Approval of the plans in any case is not to be construed as an approval of the facility as constructed and/or completed. Moreover, issuance of the Permit to Install is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.

10. Public Disclosure

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

11. Applicability

This Permit To Install is applicable only to the emissions unit(s) identified in the Permit To Install. Separate Permit To Install for the installation or modification of any other emissions unit(s) are required for any emissions unit for which a Permit To Install is required.

12. Best Available Technology

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

13. Source Operation and Operating Permit Requirements After Completion of Construction

This facility is permitted to operate each source described by this Permit to Install for a period of up to one year from the date the source commenced operation. This permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within ninety (90) days after commencing operation of the emissions unit(s) covered by this permit.

14. Construction Compliance Certification

The applicant shall provide Ohio EPA with a written certification (see enclosed form) that the facility has been constructed in accordance with the Permit to Install application and the terms and conditions of the Permit to Install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

15. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable Permit to Install fees within 30 days after the issuance of this Permit to Install.

B. Permit to Install Summary of Allowable Emissions

The following information summarizes the total allowable emissions, by pollutant, based on the individual allowable emissions of each air contaminant source identified in this permit.

SUMMARY (for informational purposes only)
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

Pollutant	Tons Per Year
Acetone	116.5
OC	28.42

Emissions Unit ID: **P002**

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(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 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)	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.
	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

2.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).

2.b 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

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 clean-up 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 (µg/m3): 26645.18
MAGLC (µg/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 (µg/m3): 1085.17
MAGLC (µg/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 (µg/m3): 490.8
MAGLC (µg/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 (µg/m3): 1223.0
MAGLC (µg/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 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 (excludingnonphotochemically 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):

a. 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, 6738.46 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

b. 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.

c. 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

d. 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.

e. 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

None

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(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 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)	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).

2. Additional Terms and Conditions

2.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.

2.b 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

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 clean-up 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: Acetone
TLV (mg/m3): 1187.12
Maximum Hourly Emission Rate (lbs/hr): 26.59 (total project)
Predicted 1-Hour Maximum Ground-Level Concentration (µg/m3): 26645.18
MAGLC (µg/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 (µg/m3): 1085.17
MAGLC (µg/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 (µg/m3): 490.8
MAGLC (µg/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 (µg/m3): 1223.0
MAGLC (µg/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.

Emissions Unit ID: **P005**

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

None

Emissions Unit ID: **P006**

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(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 specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P006 - Glenro CHOICE Machine G2 (enamel line: heat cured, revised water based coatings)	OAC rule 3745-31-05(A)(3)	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).

2. Additional Terms and Conditions

2.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.

2.b 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

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 clean-up 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: Acetone
TLV (mg/m3): 1187.12
Maximum Hourly Emission Rate (lbs/hr): 26.59 (total project)

Predicted 1-Hour Maximum Ground-Level Concentration (µg/m3): 26645.18
MAGLC (µg/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 (µg/m3): 1085.17
MAGLC (µg/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 (µg/m3): 490.8
MAGLC (µg/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 (µg/m3): 1223.0
MAGLC (µg/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 pounds / 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

None

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(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 specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P007 - Glenro CHOICE Machine G3 (enamel line: heat cured, revised water based coatings)	OAC rule 3745-31-05(A)(3)	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).

2. Additional Terms and Conditions

2.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.

2.b 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

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 clean-up 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: Acetone
TLV (mg/m3): 1187.12
Maximum Hourly Emission Rate (lbs/hr): 26.59 (total project)
Predicted 1-Hour Maximum Ground-Level Concentration (µg/m3): 26645.18
MAGLC (µg/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 (µg/m3): 1085.17
MAGLC (µg/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 (µg/m3): 490.8
MAGLC (µg/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 (µg/m3): 1223.0
MAGLC (µg/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

None

Emissions Unit ID: **P008**

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(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 specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P008 - Glenro CHOICE Machine G4 (enamel line: heat cured, revised water based coatings)	OAC rule 3745-31-05(A)(3)	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).

2. Additional Terms and Conditions

2.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.

2.b 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

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 clean-up 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: Acetone
TLV (mg/m3): 1187.12
Maximum Hourly Emission Rate (lbs/hr): 26.59 (total project)
Predicted 1-Hour Maximum Ground-Level Concentration (µg/m3): 26645.18
MAGLC (µg/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 (µg/m3): 1085.17
MAGLC (µg/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 (µg/m3): 490.8
MAGLC (µg/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 (µg/m3): 1223.0
MAGLC (µg/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

None

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(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 specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P009 - Glenro CHOICE Machine G5 (enamel line: heat cured, revised water based coatings)	OAC rule 3745-31-05(A)(3)	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).

2. Additional Terms and Conditions

2.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.

2.b 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

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 clean-up 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: Acetone
TLV (mg/m3): 1187.12
Maximum Hourly Emission Rate (lbs/hr): 26.59 (total project)
Predicted 1-Hour Maximum Ground-Level Concentration (µg/m3): 26645.18
MAGLC (µg/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 (µg/m3): 1085.17
MAGLC (µg/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 (µg/m3): 490.8
MAGLC (µg/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 (µg/m3): 1223.0
MAGLC (µg/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. 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

None

Emissions Unit ID: **P010**

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(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 specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P010 - Glenro CHOICE Machine G6 (enamel line: heat cured, revised water based coatings)	OAC rule 3745-31-05(A)(3)	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).

2. Additional Terms and Conditions

2.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.

2.b 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

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 clean-up 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: Acetone
TLV (mg/m3): 1187.12
Maximum Hourly Emission Rate (lbs/hr): 26.59 (total project)
Predicted 1-Hour Maximum Ground-Level Concentration (µg/m3): 26645.18
MAGLC (µg/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 (µg/m3): 1085.17
MAGLC (µg/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 (µg/m3): 490.8
MAGLC (µg/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 (µg/m3): 1223.0
MAGLC (µg/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

None

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(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 specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P011 - Glenro CHOICE Machine G7 (enamel line: heat cured, revised water based coatings)	OAC rule 3745-31-05(A)(3)	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).

2. Additional Terms and Conditions

2.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.

2.b 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

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 clean-up 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: Acetone
TLV (mg/m3): 1187.12
Maximum Hourly Emission Rate (lbs/hr): 26.59 (total project)
Predicted 1-Hour Maximum Ground-Level Concentration (µg/m3): 26645.18
MAGLC (µg/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 (µg/m3): 1085.17
MAGLC (µg/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 (µg/m3): 490.8
MAGLC (µg/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 (µg/m3): 1223.0
MAGLC (µg/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

None

Emissions Unit ID: **P012**

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(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 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)	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.
	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

2.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

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 clean-up 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: Acetone
TLV (mg/m3): 1187.12
Maximum Hourly Emission Rate (lbs/hr): 26.59 (total project)
Predicted 1-Hour Maximum Ground-Level Concentration (µg/m3): 26645.18
MAGLC (µg/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 (µg/m3): 1085.17

MAGLC (µg/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 (µg/m3): 490.8
MAGLC (µg/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 (µg/m3): 1223.0
MAGLC (µg/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 pounds/ 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

None