



State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL
HAMILTON COUNTY**

CERTIFIED MAIL

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

Application No: 14-05518

DATE: 3/4/2004

The Glass Hand
Eric Kilb
5700 SR 128
Cleves, OH 45002

Enclosed please find an Ohio EPA Permit to Install which will allow you to install the described source(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, I urge you to read it carefully.

The Ohio EPA is urging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Pollution Prevention at (614) 644-3469.

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, Supervisor
Field Operations and Permit Section
Division of Air Pollution Control

cc: USEPA

HCDES



**Permit To Install
Terms and Conditions**

**Issue Date: 3/4/2004
Effective Date: 3/4/2004**

FINAL PERMIT TO INSTALL 14-05518

Application Number: 14-05518
APS Premise Number: 1431084159
Permit Fee: **\$200**
Name of Facility: The Glass Hand
Person to Contact: Eric Kilb
Address: 5700 SR 128
Cleves, OH 45002

Location of proposed air contaminant source(s) [emissions unit(s)]:
**5700 SR 128
Cleves, Ohio**

Description of proposed emissions unit(s):
Polyester resin plastics product fabrication.

The above named entity is hereby granted a Permit to Install for the above described emissions unit(s) pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit 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 emissions unit(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 and specifications, the above described emissions unit(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

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.

The Glass Hand
PTI Application: 14-05518
Issued: 3/4/2004

Facility ID: 1431084159

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

<u>Pollutant</u>	<u>Tons Per Year</u>
OC	4.2

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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P001 - Polyester resin plastic product fabrication	OAC rule 3745-31-05(A)(3)	3.2 lbs OC/hr from coating 40 lbs OC/day from coating 6.6 lbs OC/day from cleanup material 3.3 TPY OC from coating 0.9 TPY OC from cleanup material
	OAC rule 3745-21-07(G)(2)	See terms B.1- B.7 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 Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the coating and cleanup material usage restrictions, the OC content limitations and the emission limitations established in this permit.
- 2.b The hourly emission limitation outlined is based upon the emissions unit's Potential to Emit (PTE). Therefore, no hourly records are required to demonstrate compliance with this limit.

B. Operational Restrictions

- 1. The styrene content of the polyester resins employed in this emissions unit shall not exceed 47

percent by weight.

2. The styrene content of the tooling gel coat employed in this emissions unit shall not exceed 38 percent by weight.
3. The styrene content of the sandable gel coat employed in this emissions unit shall not exceed 32 percent by weight.
4. The amount of raw material used in this emissions unit shall not exceed the following:

400 pounds/day and 104,000 pounds/year of polyester resin;
160 pounds/day and 6500 pounds/year of gel coat; and
120 pounds/day and 600 pounds/year of tooling gel coat.
5. The OC content of each cleanup material employed in this emissions unit shall not exceed 6.6 pounds of OC per gallon of cleanup material.
6. The amount of cleanup material used in this emissions unit shall not exceed 1 gallon/day and 250 gallons/year.
7. The permittee shall only employ nonphotochemically reactive cleanup materials in emissions unit P001.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information each day for emissions unit P001:
 - a. The company identification for each organic material employed.
 - b. The number of pounds of each resin and gel coat employed.
 - c. The number of gallons of each cleanup material employed.
 - d. The styrene content percentage of each resin and gel coat employed.
 - e. The OC content of each cleanup material, in pounds per gallon.
 - f. The total organic compound emission rate for resins, in pounds of OC emitted per day. To determine emissions from resins used, multiply the pounds used by the emission factor 0.063**.

** The emission factor is based on the styrene content of the resin applied 20% manually and 80% mechanical non atomized. The emission factor was calculated using the Unified Emission Factor for Open Molding of Composites.

- g. The total organic compound emission rate for gel coats, in pounds of OC emitted per day. To determine emissions from gel coats used, multiply the pounds used by the emission factor 0.121 for tooling gel coats and 0.094 for sandable gel coats***.

*** The emission factor is based on the styrene content of the gel coat applied found in the Unified Emission Factor for Open Molding of Composites, Gel Coat Non-Atomized Application.

- h. The total OC emission rate for cleanup material, in pounds of OC emitted per day. To determine emissions from the cleanup material used, multiply the gallons used by the OC content © x e).
- i. The total OC emission rate for all the resins and cleanup materials, in tons per month. The sum of (f + g)/2000 and (h)/2000.
- j. A record of cleanup material employed in this emissions unit, indicating whether or not the cleanup material is photochemically reactive as defined in OAC rule 3745-21-01(C)(5).
2. The permit to install for this emissions unit P001 was evaluated based on the actual materials(typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model(or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Ground-Level Concentration (MAGLC).

The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Styrene

TLV (ug/m3): 85,000

Maximum Hourly Emission Rate (lbs/hr): 3.2

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 1476

MAGLC (ug/m3): 2024

Physical changes to or 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 Toxics 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 the "Air Toxic Policy" include the following:

- a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
- b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
- c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

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

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

- a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
- b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and

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

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which include the following information:
 - a. An identification of each day during which the OC content of the cleanup materials employed exceeded 6.6 pounds of OC per gallon, and the actual OC content of the non-compliant cleanup materials employed.
 - b. An identification of each day during which the styrene content of polyester resins employed exceeded 47% by weight, and the actual styrene content of the non-compliant polyester resins employed.
 - c. An identification of each day during which the styrene content of the tooling gel coat employed exceeded 38% and the actual styrene content of the non-compliant coatings employed.
 - d. An identification of each day during which the styrene content of the sandable gel coat employed exceeded 32% and the actual styrene content of the non-compliant coatings employed.
 - e. An identification of each day during which cleanup materials were employed that were photochemically reactive, as defined in OAC rule 3745-21-01(C)(5).
 - f. An identification of each day during which the daily emissions from coatings exceeds the 40 lbs OC/day limit.
 - g. An identification of each period during which the material usage limitations specified in terms B.4. and B.6. were exceeded.

If no deviations occurred during the reporting period, the permittee shall state so in the report. The permittee shall submit the reports by January 31, April 30, July 31 and October 31 of each year and shall cover the previous calendar quarters (October through December, January through March, April through June and July through September, respectively).

2. The permittee shall submit an annual report which specifies any exceedances of the cleanup material usage limitations as well as any exceedances of the total annual organic compound

Emissions Unit ID: P001

emission limitations from this emissions unit. This report shall be submitted by January 31 of each year and cover the previous calendar year.

E. Testing Requirements

1. Compliance with the OC emission limitations specified in terms A.1. of this permit shall be determined by the information collected and recorded in term C.1. of this permit.
2. Formulation data or USEPA method 24 (for coatings) shall be used to determine the OC contents of the organic materials and used to determine if a material is photochemically reactive.
3. Compliance with the styrene content limit of the resin and gel coat and the OC content of the cleanup materials in terms B.1., B.2., B.3., and B.5 shall be determined by the record keeping in term C.1.
4. Compliance with the material usage restrictions in terms B.4. and B.6. shall be demonstrated by the record keeping in term C.1.
5. Compliance with term B.7 shall be demonstrated by the record keeping in term C.1.

13

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Issued: 3/4/2004

Emissions Unit ID: **P001**

F. Miscellaneous Requirements

None