



State of Ohio Environmental Protection Agency

**RE: PERMIT TO INSTALL REGISTRATION
MARION COUNTY**

CERTIFIED MAIL

Street Address:
1800 WaterMark Drive
Columbus, OH 43215-1099

TELE: (614) 644-3020 **FAX:** (614) 644-2329

Mailing Address:
P.O. Box 1049
Columbus, OH 43216-1049

Application No: 03-3168

DATE: March 31, 1999

U.S. Yachiyo, Inc
Hirohita Ota
2754 Sawbury Boulevard
Columbus, OH 43325

Enclosed please find an Ohio EPA Permit to Install Registration which will allow you to install the described source(s) in a manner indicated in the permit. Because this permit registration 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 with the Environmental Review Appeals Commission within thirty (30) days after notice of the Director's 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
236 East Town Street, Room 300
Columbus, Ohio 43215

Very truly yours,

A handwritten signature in black ink that reads "Thomas G. Rigo". The signature is written in a cursive style.

Thomas G. Rigo, Manager
Field Operations and Permit Section
Division of Air Pollution Control

cc: Ohio EPA, Northwest District Office, DAPC



STATE OF OHIO ENVIRONMENTAL PROTECTION AGENCY
REGISTRATION

Permit
Title

Application Number: 03-3168
APS Premise Number: 0351010089
Permit Fee: **\$150.00**
Name of Facility: U.S. Yachiyo, Inc
Person to Contact: Hirohita Ota
Address: 2754 Sawbury Boulevard
Columbus, OH 43325

Location of proposed air contaminant source(s) [emissions unit(s)]:
1177 Kellogg Parkway
Marion, OHIO

Description of proposed emissions unit(s):
INJECTION MOLDING AND PRODUCT COOLING LINE AND PNEUMATIC MATERIAL CONVEYANCE/STORAGE SYSTEM.

Date of Issuance: March 31, 1999
Effective Date: March 31, 1999

The above named entity is hereby granted a Permit to Install Registration for the above described source(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 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 and specifications, the above described source(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 Related to Monitoring and Recordkeeping 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 are inadequate 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 prove to be inadequate 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 application must be made to the Director for the installation or modification of any other emissions unit(s).

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

U.S. Yachiyo, Inc
 PTI Application: 03-3168
 March 31, 1999

Facility ID: 0351010089

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 thirty (30) 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

<u>Pollutant</u>	<u>Tons Per Year</u>
PE	0.17
OC	3.10

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>
Injection molding and product cooling line	OAC rule 3745-31-05	0.71 lb OC/hr, 3.10 TPY OC
	OAC rule 3745-21-07(G)	None (See A.2.a)

2. Additional Terms and Conditions

- a. This emissions unit is required to employ only non-photochemically reactive materials (See B.2) and hence is not subject to the requirements of OAC rule 3745-21-09(G).

B. Operational Restrictions

- 1. This permit allows the use of materials (typically coatings and cleanup materials) specified by the permittee in the permit to install application for this emissions unit. To fulfill the best available technology requirements of (OAC) rule 3745-31-05 and to ensure compliance with OAC rule 3745-15-07 (Air Pollution Nuisances Prohibited), the emission limitations specified in this permit were established using the Ohio EPA's "Air Toxic Policy" and are based on both the materials used and the design parameters of the emissions unit's exhaust system, as specified in the application. The Ohio EPA's "Air Toxic Policy" was applied for each pollutant using the SCREEN 3.0 model and comparing the predicted 1-hour maximum ground-level concentration to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for each pollutant:

Pollutant: Formic Acid

TLV (ug/m3): 9400

Maximum Hourly Emission Rate (lbs/hr): 0.71

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 172.1

MAGLC (ug/m³): 223.8

OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by the OAC rule 3745-31-01. The permittee is hereby advised that the following changes to the process may be determined to be a "modification":

- 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 specified in the above table;
- b. changes to the emissions unit or its exhaust parameters (e.g., increased emission rate [not including an increase in an "allowable" emission limitation specified in the terms and conditions of this permit], reduced exhaust gas flow rate, and decreased stack height);
- c. changes in the composition of the materials used, or use of new materials, that would result in the emission of an air contaminant not previously permitted; and,
- d. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant that has a listed TLV.

The Ohio EPA will not consider any of the above-mentioned as a "modification" requiring a permit to install, if the following conditions are met:

- a. the change is not otherwise considered a "modification" under OAC Chapter 3745-31;
- b. the permittee can continue to comply with the allowable emission limitations specified in its permit to install; and,
- c. prior to the change, the applicant conducts an evaluation pursuant to the Air Toxic Policy, determines that the changed emissions unit still satisfies the Air Toxic Policy, and the permittee maintains documentation that identifies the change and the results of the application of the Air Toxic Policy for the change.

For any change to the emissions unit or its method of operation that either would require an

Emissions Unit ID: P001

increase in the emission limitation(s) established by this permit or would otherwise be considered a "modification" as defined in OAC rule 3745-31-01, the permittee shall obtain a final permit to install prior to the change.

2. The permittee shall only employ non-photochemically reactive materials in the emissions unit. "Photochemically reactive material" is defined in OAC rule 3745-21-01(C)(5).

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information for each change where the air toxic modeling was required pursuant to the Air Toxic Policy:
 - a. background data that describes the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.); and,
 - b. 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

See Part I-General Terms and Conditions

E. Testing Requirements

1. Compliance Methods Requirements

a. Emission Limitation

0.71 lb OC/hr

Applicable Compliance Method

The hourly OC emission limitation is based on the emissions unit's potential to emit*. Therefore, no hourly recordkeeping, deviation reporting, or compliance method calculations are required to demonstrate compliance with this limit.

*The potential to emit for this emissions unit was based on the following maximum values for the injection molding process:

- i. plastic resin hourly usage rate of 1799 lbs/hr;
- ii. plastic resin OC content of 1.0%;
- iii. OC volatilization emission factor of 3.0%;

- iv. mold release agent and protectant hourly usage rate of 0.03 gal/hr and a maximum OC content of 5.28 lbs/gal; and,
- v. mold cleaner hourly usage rate of 0.01 gal/hr and a maximum OC content of 0.88 lb/gal

b. Emission Limitation

3.10 TPY OC

Applicable Compliance Method

The tons/yr limitation was developed by multiplying the lb/hr limitation by the maximum operating schedule of 8760 hrs/yr, and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation.

F. Miscellaneous Requirements

None.

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

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>
Pneumatic material conveyance/storage system	OAC rule 3745-31-05 OAC rule 3745-17-11(A) OAC rule 3745-17-07(A)	0.62 lb PE/hr, 0.086 TPY PE 0.088 TPY fugitive PE Control Requirements (See A.2.a) (See A.2.b) 20% opacity, as a 6-minute average, except as provided by the rule

2. **Additional Terms and Conditions**

- a. The "Best Available Technology (BAT)" control requirement for emissions unit P002 is the use of fabric filters.
- b. The emission limitations established pursuant to this applicable rule are less stringent than the limitations established pursuant to OAC rule 3745-31-05.

B. Operational Restrictions

1. The maximum annual material throughput for this emissions unit shall not exceed 11,032 tons per year.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions for the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall note the following in the operations log:
 - a. the color of the emissions;
 - b. whether the emissions are representative of normal operations;
 - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
 - d. the total duration of any visible emission incident; and,
 - e. any corrective actions taken to eliminate the visible emissions.
2. The permittee shall maintain monthly records of the amount (tons per month and tons, to date, for the calendar year) of the material throughput for this emissions unit.

D. Reporting Requirements

1. The permittee shall submit semiannual written reports which (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous six-month period.

E. Testing Requirements

1. Compliance Methods Requirements
 - a. Emission Limitation

0.62 lb PE/hr

Applicable Compliance Method

U.S. Yachiyo, Inc

PTI Application: **02 2160**

March

Facility ID: **0351010089**

Emissions Unit ID: **P002**

Calculations, using the maximum hourly throughput, emission factors from AP-42, Section 6.6.2, a control efficiency of 98% and a capture efficiency of 98%, shall be used to show compliance with the lb/hr limit.

b. Emission Limitation

0.086 TPY PE

Applicable Compliance Method

Calculations, using emission factors from AP-42, Section 6.6.2, a control efficiency of 98%, a capture efficiency of 98% and annual material throughput records specified in C.2, shall be used to show compliance with the annual limit.

c. Emission Limitation

0.088 TPY fugitive PE

Applicable Compliance Method

Compliance shall be determined by use of the following equation and recordkeeping required in C.2:

$$\text{Tons Fugitive PE} = (\text{EF}) \times (\text{AT}) \times (1 - \text{CE}) \times 4.38$$

EF = 0.8 lb PE/ton (AP-42, Section 6.6.2)

AT = annual material throughput in tons/yr

CE = assumed control efficiency of 98%

d. Emission Limitation

20% opacity, as a 6-minute average, except as provided by the rule

Applicable Compliance Method

OAC rule 3745-17-03(B)(1)

F. Miscellaneous Requirements

None.