MACHO PRODUCTS, INC.

April 28, 1993

Mr. John Reynolds
Bureau of Air Regulation
Florida Department of Environmental Regulation
Twin Tower Office Building
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Dear Mr. Reynolds,

Please find enclosed an Application for Permit Modification and the fee of $2,000.

This Application for Modification is necessitated by demand and by the fact that we will not be able to obtain the permit for our new factory and bring it into operation by fall of this year.

We appreciate your help in these matters.

Sincerely,

Rick Hathaway

Rick Hathaway
Systems Manager

RH;jq

Enclosure
cc: J. Reynolds
H. Zahm, C Dist

MACHO PRODUCTS, Inc. • 2550 Kirby Ave. N.E. • Palm Bay, FL 32905-3494 USA
(407) 729-6137 • (800) 327-6812 • FAX (407) 768-2598

$2,000 pd
5-3-93
Rcpt #140853

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32301

AC05-230726

BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

APPLICATION TO OPERATE/CONSTRUCT AIR POLLUTION SOURCES

SOURCE TYPE: Vinyl Dipping Operation [ ] New[1] [X] Existing[1]

APPLICATION TYPE: [ ] Construction [ ] Operation [X] Modification

COMPANY NAME: Macho Products, Inc. COUNTY: Brevard

Identify the specific emission point source(s) addressed in this application (i.e. Lime Kiln No. 4 with Venturi Scrubber; Peaking Unit No. 2, Gas Fired) Main Plant Process Ventilation Exhaust

SOURCE LOCATION: Street 2550 Kirby Avenue, N.E. City Palm Bay

UTM: East 539,775 North 3,101,430

Latitude 28 ° 02 ' 21 "N Longitude 80 ° 35 ' 33 "W

APPLICANT NAME AND TITLE: Dudley Gordon, President

APPLICANT ADDRESS: As above

SECTION I: STATEMENTS BY APPLICANT AND ENGINEER

A. APPLICANT

I am the undersigned owner or authorized representative* of Macho Products, Inc.

I certify that the statements made in this application for a modification permit are true, correct and complete to the best of my knowledge and belief. Further, I agree to maintain and operate the pollution control source and pollution control facilities in such a manner as to comply with the provision of Chapter 403, Florida Statutes, and all the rules and regulations of the department and revisions thereof. I also understand that a permit, if granted by the department, will be non-transferable and I will promptly notify the department upon sale or legal transfer of the permitted establishment.

*Attach letter of authorization

Signed: by Dudley Gordon, President for MACHO PRODUCTS, INC

Dudley Gordon, President
Name and Title (Please Type)

Date: 4/28/93 Telephone No. (407) 729-6137

B. PROFESSIONAL ENGINEER REGISTERED IN FLORIDA (where required by Chapter 471, F.S.)

This is to certify that the engineering features of this pollution control project have been designed/examined by me and found to be in conformity with modern engineering principles applicable to the treatment and disposal of pollutants characterized in the permit application. There is reasonable assurance, in my professional judgment, that

[1]See Florida Administrative Code Rule 17-2.100(57) and (104)

the pollution control facilities, when properly maintained and operated, will discher an effluent that complies with all applicable statutes of the State of Florida and the rules and regulations of the department. It is also agreed that the undersigned will furnish, if authorized by the owner, the applicant a set of instructions for the proper maintenance and operation of the pollution control facilities and, if applicable, pollution sources.

Signed A. Douglas Leonard 4/27/93

G. Douglas Leonard, P.E.
Name (Please Type)

Geraghty& Miller, Inc.
Company Name (Please Type)

1801 Penn Street, Suite 7, Melbourne, FL 32901
Mailing Address (Please Type)

Florida Registration No. 42635 Date: 4/27/93 Telephone No. (407) 951-2931

SECTION II: GENERAL PROJECT INFORMATION

A. Describe the nature and extent of the project. Refer to pollution control equipment, and expected improvements in source performance as a result of installation. State whether the project will result in full compliance. Attach additional sheet if necessary.

This project involves the production of protective martial arts equipment. The equipment i composed of foam material that is pre-cut to size and hand glued, heated through a glue dryer, and allowed to dry. The products are then dipped into a vinyl paint coating, slow dried through a dryer, and then allowed to air dry. Emissions from the glue and paint system are vented to the atmosphere.

B. Schedule of project covered in this application (Construction Permit Application Only)

Start of Construction July 1989 Completion of Construction July 1994*

C. Costs of pollution control system(s): (Note: Show breakdown of estimated costs only for individual components/units of the project serving pollution control purposes. Information on actual costs shall be furnished with the application for operation permit.)

No pollution control devices are used. As soon as a new air permit is obtained, a new factory designed for effective capture and reduction of emissions will be built. The permit application was submitted in January 1993.

D. Indicate any previous DER permits, orders and notices associated with the emission point, including permit issuance and expiration dates.

Existing construction permit is included as Appendix A.

* See Appendix A

E. Requested permitted equipment operating time: hrs/day * ; days/wk * ; wks/yr 52 ; if power plant, hrs/yr _____; if seasonal, describe: _____

* Equipment operating time is 60 to 80 hours per week or less as demand deems necessary. Various operations may operate independently.

F. If this is a new source or major modification, answer the following questions. (Yes or No)

1. Is this source in a non-attainment area for a particular pollutant?	no
a. If yes, has "offset" been applied?	n/a
b. If yes, has "Lowest Achievable Emission Rate" been applied?	n/a
c. If yes, list non-attainment pollutants.	n/a
2. Does best available control technology (BACT) apply to this source? If yes, see Section VI.	no
3. Does the State "Prevention of Significant Deterioriation" (PSD) requirement apply to this source? If yes, see Sections VI and VII.	no
4. Do "Standards of Performance for New Stationary Sources" (NSPS) apply to this source?	no
5. Do "National Emission Standards for Hazardous Air Pollutants" (NESHAP) apply to this source?	no
H. Do "Reasonably Available Control Technology" (RACT) requirements apply to this source?	no
a. If yes, for what pollutants?	n/a

b. If yes, in addition to the information required in this form, any information requested in Rule 17-2.650 must be submitted.

Attach all supportive information related to any answer of "Yes". Attach any justification for any answer of "No" that might be considered questionable.

SECTION III: AIR POLLUTION SOURCES & CONTROL DEVICES (Other than Incinerators)

A. Raw Materials and Chemicals Used in your Process, if applicable:

Description	Contaminants		Utilization Rate - lbs/hr	Relate to Flow Diagram
	Type	% Wt		
Glue (MEK)	VOC	85	6.9	See Figure 1
MEK	VOC	100	67.9	See Figure 1
Toluene	VOC	100	45.2	See Figure 1

B. Process Rate, if applicable: (See Section V, Item 1)

1. Total Process Input Rate (lbs/hr): 115.5 lb/hr

2. Product Weight (lbs/hr): n/a

C. Airborne Contaminants Emitted: (Information in this table must be submitted for each emission point, use additional sheets as necessary)

Name of Contaminant	Emission[1]		Allowed[2] Emission Rate per Rule 17-2	Allowable[3] Emission lbs/hr	Potential[4] Emission		Relate to Flow Diagram
	Maximum * lbs/hr	Actual T/yr			lbs/yr	T/yr	
Glue (MEK)	6.9	14.4					Figure 1
MEK	67.0	137.4					
Toluene	44.6	91.6					
VOCs (total)	118.5	243.4					

[1] See Section V, Item 2.

[2] Reference applicable emission standards and units (e.g. Rule 17-2.600(5)(b)2. Table II, E. (1) - 0.1 pounds per million BTU heat input)

[3] Calculated from operating rate and applicable standard.

[4] Emission, if source operated without control (See Section V, Item 3).

* Values based on estimated annual emission rates; maximum values are approximately two times the average values presented. Calculation of the average values are presented in Appendix B.

D. Control Devices: (See Section V, Item 4)

Name and Type (Model & Serial No.)	Contaminant	Efficiency	Range of Particles Size Collected (in microns) (If applicable)	Basis for Efficiency (Section V Item 5)
n/a				

E. Fuels

Type (Be Specific)	Consumption*		Maximum Heat Input (MMBTU/hr)
	avg/hr	max./hr	

*Units: Natural Gas--MMCF/hr; Fuel Oils--gallons/hr; Coal, wood, refuse, other--lbs/hr.

Fuel Analysis:

Percent Sulfur: _____ Percent Ash: _____

Density: _____ lbs/gal Typical Percent Nitrogen: _____

Heat Capacity: _____ BTU/lb _____ BTU/gal

Other Fuel Contaminants (which may cause air pollution): _____

F. If applicable, indicate the percent of fuel used for space heating.

Annual Average n/a Maximum n/a

G. Indicate liquid or solid wastes generated and method of disposal.

n/a

H. Emission Stack Geometry and Flow Characteristics (Provide data for each stack):

Stack Height: * ft. Stack Diameter: * ft.

Gas Flow Rate: * ACFM * DSCFM Gas Exit Temperature: * °F.

Water Vapor Content: * % Velocity: * FPS

* Please see Appendix A

SECTION IV: INCINERATOR INFORMATION

Type of Waste	Type 0 (Plastics)	Type I (Rubbish)	Type II (Refuse)	Type III (Garbage)	Type IV (Pathological)	Type V (Liq.& Gas By-prod.)	Type VI (Solid By-prod.)
Actual lb/hr Incinerated							
Uncontrolled (lbs/hr)							

Description of Waste _____

Total Weight Incinerated (lbs/hr) _____ Design Capacity (lbs/hr) _____

Approximate Number of Hours of Operation per day _____ day/wk _____ wks/yr. _____

Manufacturer _____

Date Constructed _____ Model No. _____

	Volume $(ft)^3$	Heat Release (BTU/hr)	Fuel		Temperature (°F)
			Type	BTU/hr	
Primary Chamber					
Secondary Chamber					

Stack Height: _____ ft. Stack Diamter: _____ Stack Temp. _____

Gas Flow Rate: _____ ACFM _____ DSCFM* Velocity: _____ FPS

*If 50 or more tons per day design capacity, submit the emissions rate in grains per standard cubic foot dry gas corrected to 50% excess air.

Type of pollution control device: [ ] Cyclone [ ] Wet Scrubber [ ] Afterburner

[ ] Other (specify) _____

Brief description of operating characteristics of control devices: n/a

Ultimate disposal of any effluent other than that emitted from the stack (scrubber water, ash, etc.):

n/a

NOTE: Items 2, 3, 4, 6, 7, 8, and 10 in Section V must be included where applicable.

SECTION V: SUPPLEMENTAL REQUIREMENTS

Please provide the following supplements where required for this application.

1. Total process input rate and product weight -- show derivation [Rule 17-2.100(127)]

2. To a construction application, attach basis of emission estimate (e.g., design calculations, design drawings, pertinent manufacturer's test data, etc.) and attach proposed methods (e.g., FR Part 60 Methods 1, 2, 3, 4, 5) to show proof of compliance with applicable standards. To an operation application, attach test results or methods used to show proof of compliance. Information provided when applying for an operation permit from a construction permit shall be indicative of the time at which the test was made.

3. Attach basis of potential discharge (e.g., emission factor, that is, AP42 test).

4. With construction permit application, include design details for all air pollution control systems (e.g., for baghouse include cloth to air ratio; for scrubber include cross-section sketch, design pressure drop, etc.)

5. With construction permit application, attach derivation of control device(s) efficiency. Include test or design data. Items 2, 3 and 5 should be consistent: actual emissions = potential (1-efficiency).

6. An 8 1/2" x 11" flow diagram which will, without revealing trade secrets, identify the individual operations and/or processes. Indicate where raw materials enter, where solid and liquid waste exit, where gaseous emissions and/or airborne particles are evolved and where finished products are obtained.

7. An 8 1/2" x 11" plot plan showing the location of the establishment, and points of airborne emissions, in relation to the surrounding area, residences and other permanent structures and roadways (Example: Copy of relevant portion of USGS topographic map).

8. An 8 1/2" x 11" plot plan of facility showing the location of manufacturing processes and outlets for airborne emissions. Relate all flows to the flow diagram.

9. The appropriate application fee in accordance with Rule 17-4.05. The check should b made payable to the Department of Environmental Regulation.

10. With an application for operation permit, attach a Certificate of Completion of Construction indicating that the source was constructed as shown in the construction permit.

SECTION VI: BEST AVAILABLE CONTROL TECHNOLOGY

A. Are standards of performance for new stationary sources pursuant to 40 C.F.R. Part 60 applicable to the source?

[ ] Yes [ ] No

Contaminant	Rate or Concentration

B. Has EPA declared the best available control technology for this class of sources (If yes, attach copy)

[ ] Yes [ ] No

Contaminant	Rate or Concentration

C. What emission levels do you propose as best available control technology?

Contaminant	Rate or Concentration

D. Describe the existing control and treatment technology (if any).

1. Control Device/System: 2. Operating Principles:

3. Efficiency:* 4. Capital Costs:

*Explain method of determining

5. Useful Life:

6. Operating Costs:

7. Energy:

8. Maintenance Cost:

9. Emissions:

Contaminant	Rate or Concentration

10. Stack Parameters

a. Height: ft.

b. Diameter: ft.

c. Flow Rate: ACFM

d. Temperature: °F.

e. Velocity: FPS

E. Describe the control and treatment technology available (As many types as applicable, use additional pages if necessary).

1.

a. Control Device:

b. Operating Principles:

c. Efficiency:[1]

d. Capital Cost:

e. Useful Life:

f. Operating Cost:

g. Energy [2]

h. Maintenance Cost:

i. Availaoility of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

2.

a. Control Device:

b. Operating Principles:

c. Efficiency:[1]

d. Capital Cost:

e. Useful Life:

f. Operating Cost:

g. Energy:[2]

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

[1]Explain method of determining efficiency.
[2]Energy to be reported in units of electrical power - KWH design rate.

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

3.

a. Control Device:

b. Operating Principles:

c. Efficiency:[1]

d. Capital Cost:

e. Useful Life:

f. Operating Cost:

g. Energy:[2]

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

4.

a. Control Device:

b. Operating Principles:

c. Efficiency:[1]

d. Capital Costs:

e. Useful Life:

f. Operating Cost:

g. Energy:[2]

h. Maintenance Cost:

i. Availability of construction materials and process chemicals:

j. Applicability to manufacturing processes:

k. Ability to construct with control device, install in available space, and operate within proposed levels:

F. Describe the control technology selected:

1. Control Device:

2. Efficiency:[1]

3. Capital Cost:

4. Useful Life:

5. Operating Cost:

6. Energy:[2]

7. Maintenance Cost:

8. Manufacturer:

9. Other locations where employed on similar processes:

a. (1) Company:

(2) Mailing Address:

(3) City:

(4) State:

[1]Explain method of determining efficiency.
[2]Energy to be reported in units of electrical power - KWH design rate.

(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions:[1]

Contaminant	Rate or Concentration

(8) Process Rate:[1]

b. (1) Company:

(2) Mailing Address:

(3) City: (4) State:

(5) Environmental Manager:

(6) Telephone No.:

(7) Emissions:[1]

Contaminant	Rate or Concentration

(8) Process Rate:[1]

10. Reason for selection and description of systems:

[1] Applicant must provide this information when available. Should this information not be available, applicant must state the reason(s) why.

SECTION VII - PREVENTION OF SIGNIFICANT DETERIORATION

A. Company Monitored Data

1. _____ no. sites _____ TSP _____ ( ) SO^{2*} _____ Wind spd/dir

Period of Monitoring _____/_____/_____ to _____/_____/_____
month day year month day year

Other data recorded _____

Attach all data or statistical summaries to this application.

* Specify bubbler (B) or continuous (C).

2. Instrumentation, Field and Laboratory

a. Was instrumentation EPA referenced or its equivalent? [ ] Yes [ ] No

b. Was instrumentation calibrated in accordance with Department procedures?

[ ] Yes [ ] No [ ] Unknown

B. Meteorological Data Used for Air Quality Modeling

1. _____ Year(s) of data from ____/____/____ to ____/____/____
month day year month day year

2. Surface data obtained from (location)_____

3. Upper air (mixing height) data obtained from (location)_____

4. Stability wind rose (STAR) data obtained from (location)_____

C. Computer Models Used

1. _____ Modified? If yes, attach description.

2. _____ Modified? If yes, attach description.

3. _____ Modified? If yes, attach description.

4. _____ Modified? If yes, attach description.

Attach copies of all final model runs showing input data, receptor locations, and principle output tables.

D. Applicants Maximum Allowable Emission Data

Pollutant	Emission Rate	
TSP	_____	grams/sec
SO^2	_____	grams/sec

E. Emission Data Used in Modeling

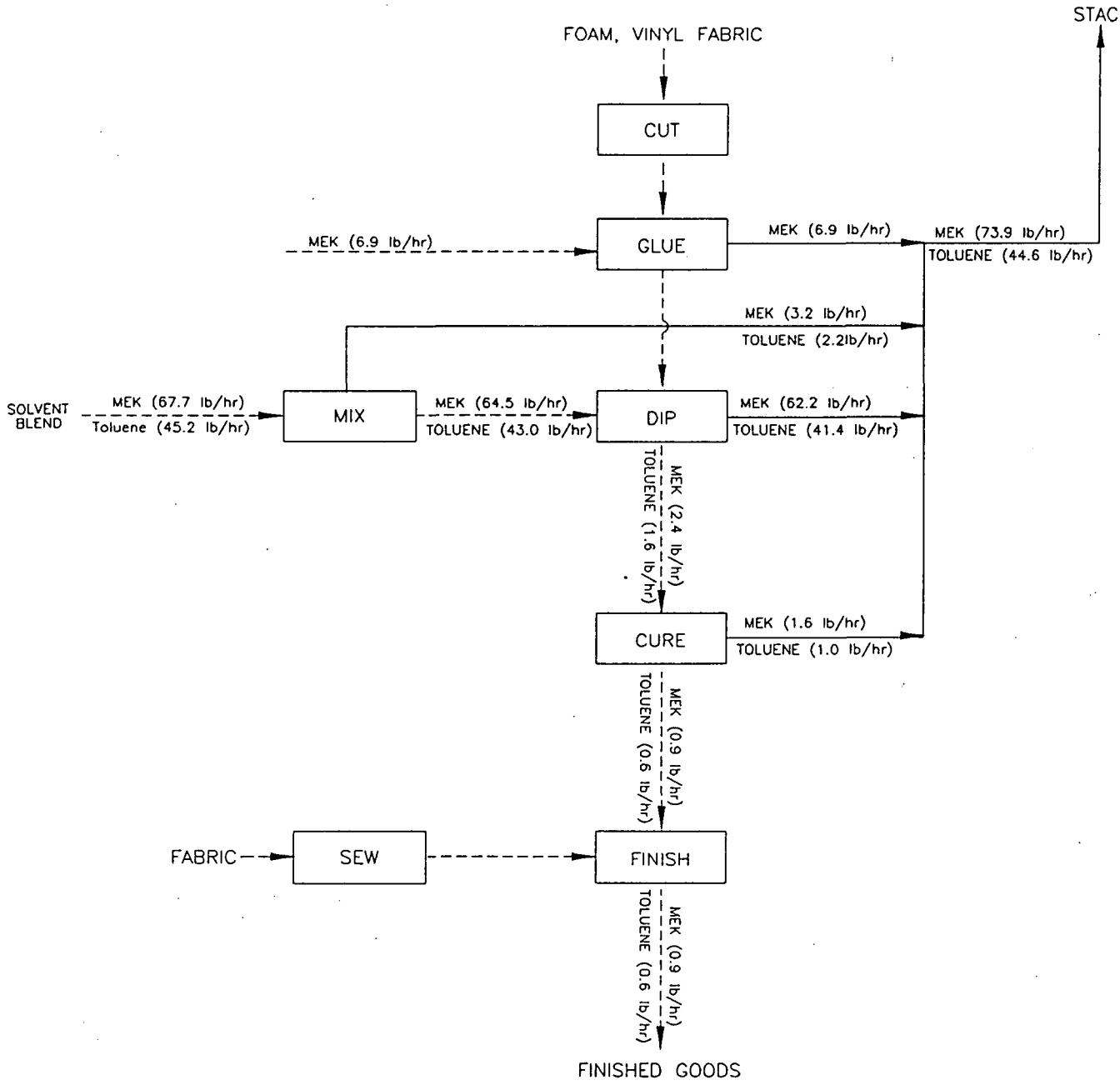
Attach list of emission sources. Emission data required is source name, description of point source (on NEDS point number), UTM coordinates, stack data, allowable emissions, and normal operating time.

F. Attach all other information supportive to the PSD review.

G. Discuss the social and economic impact of the selected technology versus other applicable technologies (i.e., jobs, payroll, production, taxes, energy, etc.). Include assessment of the environmental impact of the sources.

H. Attach scientific, engineering, and technical material, reports, publications, journals, and other competent relevant information describing the theory and application of the requested best available control technology.

DRAFTER: J.P. | APPROVED: D.L. | CHECKED: D.L. | DRAWING: MACHO-93 | FILE NO.: F:\MISC | PRJCT NO.: MF21001 | DWG DATE: 26APRIL93



LEGEND

NON-VOC EMITTING PROCESS

VOC EMISSION WITH ER CONTROLS

NOTE: ALL VALUES ARE BASED ON YEARLY AVERAGES.

GERAGHTY & MILLER, INC.
Environmental Services

PROCESS FLOW DIAGRAM
1993 PROJECTED SOLVENT USAGE AND AIR EMISSIONS
MACHO PRODUCTS

FIGURE
1

APPENDIX A

Florida Department of Environmental Regulation
Twin Towers Office Bldg. ● 2600 Blair Stone Road ● Tallahassee, Florida 32399-2400
Bob Martinez, Governor Dale Twachtmann, Secretary John Shearer, Assistant Secretary

PERMITTEE:
Macho Products, Inc.
2250 Kirby Avenue
Palm Bay, FL 32905

Permit Number: AC 05-166484
Expiration Date: May 31, 1993
County: Brevard
Latitude/Longitude: 28°02'21"N
80°35'33"W
Project: Exhaust Duct System for Vinyl Coating Facility

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Chapters 17-2 and 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

For the installation of an exhaust duct system for a vinyl coating facility. This facility is located in Palm Bay, Brevard County, Florida. The UTM coordinates of this site are Zone 17, 539.8 km E and 3,101.4 km N.

The source shall be in accordance with the permit application, plans, documents, amendments and drawings, except as otherwise noted in the General and Specific Conditions.

Attachment:

1. Application to Operate/Construct Air Pollution Sources, DER Form 17-202(1), received on June 19, 1989.
2. DER letter dated July 12, 1989, requesting additional information.
3. Applicant's letter dated July 21, 1989, supplying information requested.

GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth herein are "Permit Conditions" and as such are binding upon the permittee and enforceable pursuant to the authority of Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is hereby placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of the "Permit Conditions" by the permittee, its agents, employees, servants or representatives.

2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.

3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Nor does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit does not constitute a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.

4. This permit conveys no title to land or water, does not constitute state recognition or acknowledgement of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the state. Only the Trustees of the Internal Improvement Trust Fund may express state opinion as to title.

5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, plant or aquatic life or property and penalties therefore caused by the construction or operation of this permitted source, nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.

GENERAL CONDITIONS:

6. The permittee shall at all times properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law, access to the premises, at reasonable times, where the permitted activity is located or conducted for the purpose of:

a. Having access to and copying any records that must be kept under the conditions of the permit;

b. Inspecting the facility, equipment, practices, or operations regulated or required under this permit; and

c. Sampling or monitoring any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

Reasonable time may depend on the nature of the concern being investigated.

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately notify and provide the Department with the following information:

a. a description of and cause of non-compliance; and

b. the period of noncompliance, including exact dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

GENERAL CONDITIONS:

The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or revocation of this permit.

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source, which are submitted to the Department, may be used by the Department as evidence in any enforcement case arising under the Florida Statutes or Department rules, except where such use is proscribed by Sections 403.73 and 403.111, Florida Statutes.

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 17-4.12 and 17-30.30, as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

12. This permit is required to be kept at the work site of the permitted activity during the entire period of construction or operation.

13. The permittee shall comply with the following monitoring and record keeping requirements:

a. Upon request, the permittee shall furnish all records and plans required under Department rules. The retention period for all records will be extended automatically, unless otherwise stipulated by the Department, during the course of any unresolved enforcement action.

b. The permittee shall retain at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation), copies of all reports required by this permit, and records of all data used to complete the application for this permit. The time period of retention shall be at least three years from the date of the sample, measurement, report or application unless otherwise specified by Department rule.

GENERAL CONDITIONS:

c. Records of monitoring information shall include:

- the date, exact place, and time of sampling or measurements;
- the person responsible for performing the sampling or measurements;
- the date(s) analyses were performed;
- the person responsible for performing the analyses;
- the analytical techniques or methods used; and
- the results of such analyses.

14. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be submitted or corrected promptly.

SPECIFIC CONDITIONS:

1. The construction and operation of this source shall be in accordance with the capacities and specifications stated in the application.

2. The source shall be allowed to operate for up to 2,080 hours per year.

3. Visible emissions from the source shall not be greater than 20% opacity and compliance shall be demonstrated at 90-100% of permitted capacity using DER Method 9 in accordance with F.A.C. Rule 17-2.700.

4. One of the following steps must be carried out before January 1, 1993:

a. installation of a state-of-the-art pollution control device limiting VOC emissions to 10.0 lbs per hour (based on 95% efficiency); 80 lbs per day (30 day average).

b. conversion to a water-based or low solvent content coating or other process approved by the Bureau of Air Regulation.

The permittee shall submit a quarterly report to the Bureau of Air Regulation briefly summarizing progress on these steps.

PERMITTEE:
Macho Products, Inc.

Permit No. AC 05-166484
Expiration Date: May 31, 1993

SPECIFIC CONDITIONS:

5. No air pollutants shall be discharged which cause or contribute to an objectionable odor.

6. VOC compliance shall be demonstrated using EPA Method 25 or 25A and the results reported to the Department's Central District office before this construction permit expires. The Department shall be notified at least 15 days in advance of the compliance test.

7. The permittee, for good cause, may request that this construction permit be extended. Such a request shall be submitted to the Bureau of Air Regulation prior to 60 days before the expiration of the permit (F.A.C. Rule 17-4.090).

8. An application for an operation permit must be submitted to the Central District office at least 90 days prior to the expiration date of this construction permit or within 45 days after completion of compliance testing, whichever occurs first. To properly apply for an operation permit, the applicant shall submit the appropriate application form, fee, certification that construction was completed noting any deviations from the conditions in the construction permit, and compliance test reports as required by this permit (F.A.C. Rule 17-4.220).

Issued this 14 day
of November, 1989

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION

Dale Twachtmann

Dale Twachtmann, Secretary

APPENDIX B

1992 SOLVENT USE BY FACTORY DEPARTMENT

MACHO PRODUCTS, INC., PALM BAY, FLORIDA

Total Solvent Use 1992 202 tons

Solvent Use by Factory Department 1992

A. Gluing

Adhesive Use	13.8 tons
Solvent (MEK)	11.7 tons

Basis: Mass Balance
(Purchases) - (Inventory Change)

B. Paint Mixing

Usage: 2.5 gallons per batch of 130 gallons of paint
Solvent: 60 percent MEK, 40 percent Toluene
Basis: Direct Measurement

130 gallons paint x 0.8 = 104 lbs solvent

Ratio: 2.5/104 = 0.024

(2.5/104) x (202 - 11.7) = 4.6 tons

C. Curing

Usage: x grams per set of equipment produced
Basis: Direct Measurement
Solvent: 60 percent MEK, 40 percent Toluene

x grams/set x Q sets produced = 8×10^6 grams = 8.7 tons

NOTE: x and Q are company confidential

D. Normal Migration (left in product)

(1) Solvent left in the coating at the time of packaging.
(2) Not included in emissions reporting

Use: *y* grams per set
Solvent: 60 percent MEK, 40 percent Toluene
Basis: Direct Measurement

$$y \text{ grams/set} \times Q \text{ sets produced} = 3.5 \times 10^6 \text{ grams} = 3.9 \text{ tons}$$

NOTE: *y* and *Q* are company confidential

E. Paint Dipping

Basis: Mass Balance
Total Solvent Used - [Gluing + Mixing + Curing + Normal Migration]
201.8 - (11.7 + 4.6 + 6.5 + 3.9) = 175.1 tons

EXAMPLE CALCULATIONS FOR

1993 ESTIMATED AIR EMISSIONS

Example: VOC Emission from Mixing

1992 Estimated Use in Tons = 4.6 tons

1993 Use in Tons = 4.6 x 1.23 = 5.6 tons

Hours of Operation per Year = 8 hrs/day x 5 days/wk x 52 wks/yr = 2080 hours

1993 Use in lbs/hr = 5.6 x 2000/2080 = 5.4 lbs/hr

Total Solvent Emissions (other than glueing) = 5.4 (mix) + 2.6 (cure) + 103.6 (dip) = 111.6 lbs/hr (1993)

111.6 x 0.6 = 67.0 lbs/hr MEK

111.6 x 0.4 = 44.6 lbs/hr Toluene

Total MEK = 67.0 + 6.9 (from glue) = 73.9 lbs/hr
Toluene = 44.6

Total Solvent Emissions = 118.5 lbs/hr (1993 estimated usage)

1993 PROJECTED SOLVENT USAGE AND AIR EMISSIONS

MACHO PRODUCTS, INC., PALM BAY, FLORIDA

	Use 1992 Tons	Use 1993 Tons	Hours of Operation Per Year	Use 1993 lbs/hr	Total Emissions lbs/hr
Glue (solvent only)	11.7	14.4	4160	6.9	6.9
Mix	4.6	5.6	2080	5.4	5.4
Cure	6.5	8.0	4160	2.6	2.6
Dip	175.1	215.4	6240	103.6	103.6
Normal Migration	3.9	4.8		1.5	
Total	201.8	248.2		120.0	118.5

~~4.8~~
243.4