

Check Sheet

Company Name: MACHO PRODUCTS INC
Permit Number: AE 05-166482, -166484
PSD Number: _____
Permit Engineer: _____

Application:

- Initial Application
- Incompleteness Letters
- Responses
- Waiver of Department Action
- Department Response
- Other

Cross References:

-
-
-

Intent:

- Intent to Issue
- Notice of Intent to Issue
- Technical Evaluation
- BACT Determination
- Unsigned Permit

Correspondence with:

- EPA
- Park Services
- Other
- Proof of Publication
- Petitions - (Related to extensions, hearings, etc.)
- Waiver of Department Action
- Other

Final Determination:

- Final Determination
- Signed Permit
- BACT Determination
- Other

Post Permit Correspondence:

- Extensions/Amendments/Modifications
- Other

In the folder labeled as follows there are documents, listed below, which were not reproduced in this electronic file. That folder can be found in one of the file drawers labeled Supplementary Documents Drawer. Folders in that drawer are arranged alphabetically, then by permit number.

Folder Name: Macho Products, Inc

Permit(s) Numbered:

AC	05	-	166482
AC	05	-	166484

Period during
which document
was received:

Detailed Description

APPLICATION 19 JUNE 1989	1.	36"×24" BLUEPRINT: GLUING & DIPPING BAY PLAN (DRAWING NUMBER: 1)
19 JUNE 1989	2.	36"×24" BLUEPRINT: DUCT SUPPORT (DRAWING NUMBER: 2)

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

VERO LAKES ESTATE HOMEOWNERS
ASSN., SEBASTIAN HOMEOWNERS
ASSN., SEBASTIAN ELEMENTARY
SCHOOL PTA, SEBASTIAN RIVER
MIDDLE SCHOOL PTA, PELICAN
ISLAND ELEMENTARY SCHOOL PTA,
and NATIONAL CHAPTER #3865,
NATIONAL CAMPERS AND HIKERS
ASSOCIATION,

Petitioners,

vs.

DOAH CASE NO. 93-2810
OGC CASE NO. 93-1622

MACHO PRODUCTS, INC. and
STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION,

Respondents.

FINAL ORDER

On May 10, 1993, the Florida Department of Environmental Protection (Department) received a Petition for Administrative Hearing from Petitioners, Vero Lakes Estate Homeowners Association, Sebastian Homeowners Association, Sebastian Elementary School PTA, Sebastian River Middle School PTA, Pelican Island Elementary School PTA, and National Chapter #3865, National Campers and Hikers Association. The Petitioners challenged the Department's decision to issue Permit No. AC31-225067 to Macho Products, Incorporated, to construct a protective equipment manufacturing operation which is a source of air emissions. The source is located in Indian River County, Florida.

On June 30, 1993, after receiving a Stipulation for Dismissal, the assigned hearing officer issued an order closing

Department of Environmental Regulation
Routing and Transmittal Slip

To: (Name, Office, Location)

1.

2.

3.

4.

Clare Jancy
AIR

Remarks:

John Reynolds

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JUL 14 1993

Division of Air
Resources Management

From

Doug Beason

Date

7-13-93

Phone

8-9730

the file of the Division of Administrative Hearings and relinquishing jurisdiction back to the Department. See Exhibit 1. There being no further matters to consider,

IT IS ORDERED:

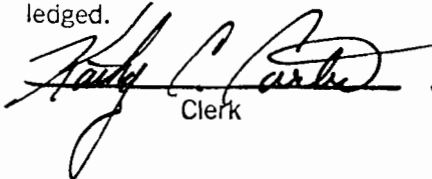
The Department's Southwest District Office is directed to issue Permit No. AC31-225067 in accordance with the Stipulation for Dismissal attached as Exhibit 2. The Department's file in this matter is closed.

Any party to this order has the right to seek judicial review of the order under section 120.68 of the Florida Statutes by the filing of a notice of appeal under rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department in the Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400 and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate district court of appeal. The notice of appeal must be filed within 30 days from the date this order is filed with the clerk of the Department.

DONE AND ORDERED this 9th day of July 1993 in Tallahassee, Florida.

FILING AND ACKNOWLEDGEMENT

FILED, on this date, pursuant to S120.52 Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.


Clerk 7/12/93
Date

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION


KENNETH J. PLANTE
General Counsel

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, FL 32399-2400
Telephone: (904) 488-9730

CERTIFICATE OF SERVICE

I CERTIFY that a true copy of the foregoing was mailed to:

Ann Cole, Clerk
William R. Dorsey, Jr.
Hearing Officer
Division of Administrative Hearing
The DeSoto Bldg.
1230 Apalachee Parkway
Tallahassee, FL 32399-1550

James S. Alves, Esquire
Post Office Box 6526
Tallahassee, Florida 32314

Melody Manning
VERO LAKES ESTATES HOA
7925 92nd. Avenue
Vero Beach, Florida 32967

John Revella
SEBASTIAN PROPERTY OWNERS
429 Georgia Boulevard
Sebastian, Florida 32958

Shawn Rogers
SEBASTIAN ELEM. PTA
408 Ponoka Street
Sebastian, Florida 32958

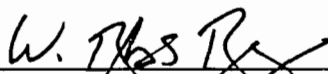
Debbie Curbow
SEBASTIAN MIDDLE SCH. PTA
1080 Evernia Street
Sebastian, Florida 32958

Jennie Berry
PELICAN IS. ELEM. PTA
Post Office Box 156
Winter Beach, Florida 32971

Charles Hart
NAT'L CAMPER & HICKER ASS'N
Post Office Box 1382
Sebastian, Florida 32978

on this 13th day of July 1993.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION



W. DOUGLAS BEASON
Assistant General Counsel

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, FL 32399-2400
Telephone: (904) 488-9730

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JUL 2 1993

STATE OF FLORIDA
DIVISION OF ADMINISTRATIVE HEARINGS

Dept. of Environmental Reg.
Office of General Counsel

VERO LAKES ESTATES HOMEOWNERS)
ASSN., SEBASTIAN HOMEOWNERS)
ASSN., SEBASTIAN ELEMENTARY)
SCHOOL PT, SEBASTAIN RIVER)
MIDDLE SCHOOL PTA, PELICAN)
ISLAND ELEMENTARY SCHOOT PTA)
and NATIONAL CHAPTER #3865,)
NATIONAL CAMPERS AND HIKERS)
ASSOCIATION,)

Petitioners,)

vs.)

CASE NO. 93-2810

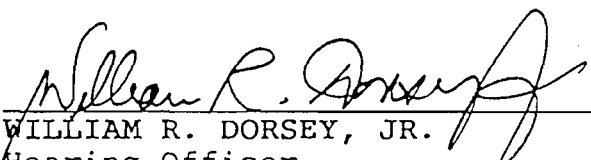
MACHO PRODUCTS, INC., and)
DEPARTMENT OF ENVIRONMENTAL)
REGULATION,)

Respondents.)

ORDER CLOSING FILE

The Stipulation For Dismissal filed by the parties on June 28, 1993, is granted. Jurisdiction is relinquished to the Department of Environmental Regulation, and the file of the Division of Administrative Hearings is closed.

DONE AND ORDERED in Tallahassee, Leon County, Florida, this 30th day of June 1993.


WILLIAM R. DORSEY, JR.
Hearing Officer
Division of Administrative Hearings
The DeSoto Building
1230 Apalachee Parkway
Tallahassee, Florida 32399-1550
(904) 488-9675

Filed with the Clerk of the
Division of Administrative Hearings
this 30th day of June 1993.

Copies furnished:

Melody Manning
7925 92nd Avenue
Vero Beach, Florida 32967

John Revella
429 Georgia Boulevard
Sebastian, Florida 32958

Shawn Rogers
408 Ponoka Street
Sebastian, Florida 32958

Debbie Curbow
108 Evernia Street
Sebastian, Florida 32958

Jennie Berry
Post Office Box 156
Winter Beach, Florida 32971

Charles Hart
Post Office Box 1382
Sebastian, Florida 32978

James S. Alves, Esquire
Post Office Box 6525
Tallahassee, Florida 32314

Douglas Beason, Esquire
Department of Environmental Regulation
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

RECEIVED

JUN 29 1993

STATE OF FLORIDA
DIVISION OF ADMINISTRATIVE HEARINGS

Dept. of Environmental Reg.
Office of General Counsel

VERO LAKES ESTATES HOMEOWNERS)
ASSN., SEBASTIAN HOMEOWNERS)
ASSN., SEBASTIAN ELEMENTARY)
SCHOOL PTA, SEBASTIAN RIVER)
MIDDLE SCHOOL PTA, PELICAN)
ISLAND ELEMENTARY SCHOOL PTA,)
and NATIONAL CHAPTER # 3865,)
NATIONAL CAMPERS AND HIKERS)
ASSOCIATION)
)
vs.)
)
MACHO PRODUCTS, INC., and)
DEPARTMENT OF ENVIRONMENTAL)
REGULATION.)
_____)

DOAH Case No. 93-2810
DER Case No. 93-1622

STIPULATION FOR DISMISSAL

Pursuant to Florida Administrative Code Rule 60Q-2.033(2), all Petitioners and Respondents Macho Products, Inc. and State of Florida Department of Environmental Regulation ("Department") jointly file this Stipulation For Dismissal in order to resolve this case in accordance therewith. The parties jointly agree:

1. This proceeding relates to the Department's Intent to Issue an air construction permit to Macho Products, Inc. for the construction of a protective equipment manufacturing plant that will be a source of air emissions on a site located in Indian River County, Florida. On or about May 10, 1993, the Petitioners filed a Petition requesting that certain conditions be included in that permit.

2. Representatives of Macho Products, Inc. have conferred with representatives of all Petitioners regarding the Petitioners' concerns. During these conferences, Macho Products, Inc. explained

measures that it is willing to undertake to address the Petitioners' concerns. Macho Products, Inc., therefore, in consideration for Petitioners' agreement to join in this Stipulation for Dismissal and rescind their Petition, agrees to the following settlement conditions concerning the operation and maintenance of its manufacturing facility to be constructed in Indian River County, Florida.

(a) Macho Products, Inc. shall design and construct the facility in a manner that facilitates future conversion, partially or wholly, to utilization of water-based coatings in its manufacturing process. At such time as it is technologically and economically feasible to reduce VOC emissions released to the atmosphere via increased utilization of water-based coatings in the manufacturing process in lieu of capture and control of VOC emissions associated with currently feasible solvent based coatings, Permittee shall submit to the Department a permit modification application and timetable for converting to increased utilization of water-based solvents.

(b) Macho Products, Inc. agrees that upon commencement of operation no less than 80% of all gluing operations per calendar year shall coincide with operation of the emission capture system and incinerator.

(c) Hours of Delivery -- Deliveries of methyl ethyl ketone and toluene shall not occur between the hours of 7:00 a.m. and 3:00 p.m. on school days.

(d) Shelter Construction -- Macho Products, Inc. shall construct, prior to commencement of operation, and maintain a sturdy, impervious shelter that prevents substantial rainwater accumulations in the outdoor storage tank containment area during typical rainfall conditions.

3. All Petitioners and both Respondents agree that the foregoing settlement conditions, as set forth in paragraph 2, constitute a mutually acceptable resolution and compromise regarding the issues raised in the Petition. Therefore, without adjudication of any legal or factual issues raised in the Petition, all Petitioners and both Respondents mutually agree to the terms of this Stipulation for Dismissal. The final air construction permit will be issued by the Department no later than 21 days from the date of filing this Stipulation For Dismissal. Moreover, all Petitioners hereby agree to rescind their Petition in settlement of this matter.

WHEREFORE, the undersigned parties respectfully request entry of a Recommended Order dismissing this proceeding.

Respectfully submitted this 28th day of June, 1993.

Charl A. Hart for Melody Manning

Melody Manning
Vero Lakes Estates Homeowners
Association
7925 92nd Avenue
Vero Beach, FL 32967

John Revella

John Revella
Sebastian Property Owners
Association
429 Georgia Boulevard
Sebastian, FL 32958

Ray Brown (President)

Shawn Rogers

Shawn Rogers
Sebastian Elementary PTA
408 Ponoka Street
Sebastian, FL 32958

Debbie Curbow

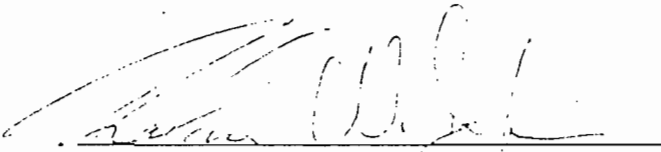
Debbie Curbow
Sebastian Middle School PTA
1080 Evernia Street
Sebastian, FL 32958

Jennie Berry

Jennie Berry
Pelican Island Elementary PTA
Post Office Box 156
Winter Beach, FL 32971

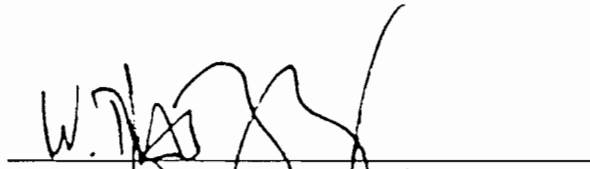
Charles R. Hart

Charles Hart
National Campers & Hikers Assoc.
Post Office Box 1382
Sebastian, FL 32978



James S. Alves, Esquire
Angela R. Morrison, Esquire
Dalana W. Johnson, Esquire
Hopping Boyd Green & Sams
Post Office Box 6526
Tallahassee, FL 32314
(904) 222-7500

Attorneys for Macho Products,
Inc.



Douglas Beason, Esquire
Office of General Counsel
Department of Environmental
Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, FL 32399-2400
(904) 488-9730

Attorney for Florida Department
of Environmental Regulation

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that the original and a true and correct copy of the foregoing has been provided via U.S. Mail this 28th day of June, 1993, to:

Melanie Manning
Vero Lakes Estates Homeowners
Association
7925 92nd Avenue
Vero Beach, FL 32967

John Revella
Sebastian Property Owners Association
429 Georgia Boulevard
Sebastian, FL 32958

Shawn Rogers
Sebastian Elementary PTA
408 Ponoka Street
Sebastian, FL 32958

Debbie Curbow
Sebastian Middle School PTA
1080 Evernia Street
Sebastian, FL 32958

Jennie Berry
Pelican Island Elementary PTA
Post Office Box 156
Winter Beach, FL 32971

Charles Hart
National Camper and Hikers
Association
Post Office Box 1382
Sebastian, FL 32978

Douglas Beason
Department of Environmental
Regulation
2600 Blair Stone Road
Tallahassee, FL 32399-2400


Attorney

December 29, 1992

CERTIFIED MAIL

Mr. C. H. Fancy, P.E.
Chief, Bureau of Air Regulation
Florida Department of Environmental Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Dear Mr. Fancy:

Re: Permit AC 05-166484

Your letter of February 27, 1992 agreed to amend referenced permit to allow Macho Products, Inc. additional time for pollution equipment installation or process conversion. It was stipulated that you would require evidence before January 1, 1993 showing that we had entered into a contract with a supplier to carry out the required actions to completion. Additionally, a schedule was to be provided to show completion occurring not later than July 1, 1994.

During the additional time allowed by the amendment to our permit, we continued our aggressive pursuit of a low solvent content coating. Although we enjoyed some success as a result of those efforts, it became apparent that the process conversion option would not meet the requirements of our permit within the time specified. Consequently, the Board of Directors of Macho Products has decided to construct new manufacturing facilities to include the procurement and installation of state of the art emission reduction equipment. The following actions have been accomplished in conjunction with this project and are submitted as evidence of our intent and contractual commitments to satisfy the requirements of our permit as amended:

- a. On June 17, 1992, we contracted for 10 acres of land in Indian River County which will be the site of our new production facility. We have closed on that property. Site planning and building design are in the advanced stages. We have received bank financing commitment letters. The address assigned by Indian River County planning officials is 10045 102nd Terrace, Vero Beach, FL 32960.
- b. On July 13, 1992, we entered into a contract to retain the services of DP Associates, Inc. to provide industrial engineering services.
- c. On July 31, 1992, we entered into a contract with Peter W. Jones, Architect, P.A. to provide architectural advice and services for the plant construction.



MACHO PRODUCTS, INC.

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Division of Air
Resources Management

- d. On August 3, 1992, we entered into a contract to retain the services of James E. Stivers, President, Commercial Investment Group of America, Inc. who will be the General Contractor (CG C047428) for the construction.
- e. On August 7, 1992, we entered into a contract to retain the services of RELCO Unlimited to provide mechanical engineering services. Separate provisions of this contract provide for the engineering and design of our coating facility which will house the emission reduction equipment.
- f. On August 19, 1992, we entered into a contract to retain the services of Mosby & Associates, Inc. to provide civil engineering services.
- g. On December 14, 1992, we retained the services of the prestigious engineering firm of Geraghty and Miller, Inc. to assist us in the preparation and submission of the Air Permit Application for our new plant location.
- h. On December 16, 1992, Mr. Rick Hathaway, Systems Manager, Macho Products and Mr. R. J. Vadimsky, President, RELCO Unlimited (mechanical engineering consultants on our building construction) met with Mr. John Reynolds, Air Permitting Engineer, FDER to review our draft permit and discuss general plans for emission reduction procedures in our new facility.
- i. On December 28, 1992, we forwarded a letter to Stelter & Brinck, Inc. a company engaged in the engineering and fabrication of thermal and catalytic fume incinerators. Our letter stated our agreement to purchase a fume incinerator system from Stelter & Brinck for treatment of our exhaust stream and established, for planning purposes, a July 1993 equipment delivery date. (Copy at enclosure)

Although our planning in terms of what we are going to do is fairly well established at this point, our commitment to a specific time schedule is less firm. Our general concept for execution suggests the following:

- a. submission of our new facility Air Permit Application by the third week of January 1993.
- b. provision of all process unique data to Stelter & Brinck by the end of February 1993.
- c. approval of the Air Permit Application by the end of May 1993.
- d. completion of coating facility construction by the end of June 1993.

Mr. C. H. Fancy, P.E.
December 29, 1992
Page 3




- e. delivery and installation of catalytic incinerator at the new factory site by end July 1993.
- f. testing, inspection and approval of emission reduction device and issuance of Operating Permit by the end of October 1993.

At this time, these planning dates must be considered tentative since their attainment depends in large measure on matters presently beyond our control. However, I am confident that we will have no difficulty in bringing our state of the art emission reduction system on line in advance of the required completion date of July 1, 1994 established by our amended permit.

I thank you and the members of your staff for the continuing professional support and willing cooperation extended to us. If I can be of assistance, please contact me.

Sincerely,


Dudley V. Gordon
President

DJG;jq

Encl



MACHO PRODUCTS, INC.

December 28, 1992

Mr. John M. Marcheschi
Manager, Environmental Products
Stelter & Brinck, Inc.
201 Sales Avenue
Harrison, OH 45030-1485

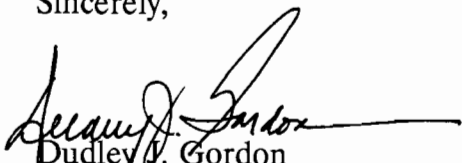
Dear Mr. Marcheschi,

Macho Products, Inc. agrees to purchase an appropriate fume incineration system from Stelter & Brinck, Inc. for treatment of Macho Products Inc.'s exhaust stream. The incinerator technology to be used will be determined by consensus between Macho Products Inc., Stelter & Brinck, Inc., and The Camet Co. based on stack test results already completed by Macho Products, Inc. and a new test to be done by an independent competent testing company.

Stelter & Brinck, Inc. acknowledges that the application of appropriate equipment is the foremost concern of all parties mentioned above and will therefore share the cost of the stack test to be done at Macho Products. This shared cost will be in the form of a credit on the new incinerator to be applied to the first progress payment.

Due to the requirement to deliver the system by July, 1993, it is recognized by all parties that time is of the essence and therefore Macho Products agrees to arrange the stack testing so that results will be available to Camet and Stelter & Brinck no later than February 26, 1993.

Sincerely,


Dudley V. Gordon
President

DJG;jq



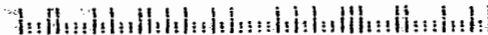
MACHO PRODUCTS, INC.
2550 Kirby Ave. N.E. • Palm Bay, FL
32905-3494 USA



RETURN RECEIPT REQUESTED



Mr. C.H. Fancy, P.E.
Chief, Bureau of Air Regulation
Florida Department of Environmental Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, FL 32399-2400



SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt Fee will provide you the signature of the person delivered to and the date of delivery.

I also wish to receive the following services (for an extra fee):

- 1. Addressee's Address
- 2. Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

Mr. Dudley J. Gordon, President
 Macho Products, Inc.
 2550 Kirby Avenue
 Palm Bay, FL 32905

4a. Article Number
 P 617 884 160

4b. Service Type
 Registered Insured
 Certified COD
 Express Mail Return Receipt for Merchandise

7. Date of Delivery
 4/1/92

8. Addressee's Address (Only if requested and fee is paid)

5. Signature (Addressee)
Dudley J. Gordon

6. Signature (Agent)
[Signature]

PS Form 3811, November 1990 *U.S. GPO: 1991-287-066

DOMESTIC RETURN RECEIPT

P 617 884 160



Certified Mail Receipt

No Insurance Coverage Provided
 Do not use for International Mail
 (See Reverse)

Sent to Mr. Dudley J. Gordon, Macho	
Street & No. Products 2550 Kirby Avenue	
P.O., State & ZIP Code Palm Bay, FL 32905	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Address of Delivery	
TOTAL Postage & Fees	\$
Postmark or Date Mailed: 3-30-92 Permit AC 05-166484	

PS Form 3800, June 1990



Florida Department of Environmental Regulation

Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400

Lawton Chiles, Governor

Carol M. Browner, Secretary

March 25, 1992

CERTIFIED MAIL - RETURN RECEIPT REQUESTED.

Mr. Dudley J. Gordon, President
Macho Products, Inc.
2550 Kirby Avenue
Palm Bay, Florida 32905

Dear Mr. Gordon:

Re: Amendment of Permit AC 05-166484

The Department received your amendment fee for modification of the construction permit referenced above. The request is acceptable and the following modification is made:

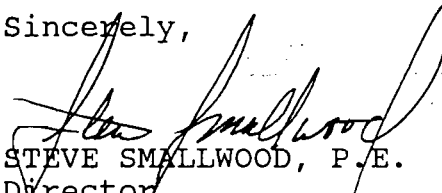
Project: AC 05-166484

Add Specific Condition No. 4.c.:

4.c. In the event that neither 4.a. nor 4.b. above is carried out to completion before January 1, 1993, the permittee shall submit evidence to the Department before said date showing that permittee has entered into a contract with a supplier to carry out No. 4.a. or 4.b. to completion, and also a schedule showing the dates on which installation will begin and end, with completion occurring not later than July 1, 1994.

This letter shall become Attachment No. 4 to the subject permit.

Sincerely,


STEVE SMALLWOOD, P.E.
Director
Division of Air Resources
Management

SS/JR/plm

c: C. Collins, CD
F. Cross, Jr., P.E.

February 19, 1992

Mr. Preston Lewis
Supervisor for Air Permitting
Division of Air Resources Management
Florida Department of Environmental Regulation



MACHO PRODUCTS, INC.

Dear Mr. Lewis:

Thank you for your telephone call yesterday afternoon and your interest in helping us work through our environmental challenges.

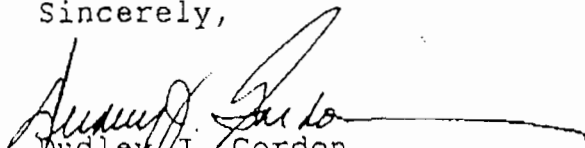
As you requested, I am forwarding for your review a copy of the letter we recently received from PDI, Inc, a water-based coating formulator, with whom we have had extensive interaction. The PDI letter outlines their expectations, along with associated timelines, for providing us with an acceptable low solvent content coating.

I mentioned during our telephone conversation that we have two potential solutions to the environmental problem confronting us. We can either install a pollution control device, e.g. a catalytic incinerator, or we can convert to a low solvent content coating. We would prefer the latter for several reasons, the most important of which are: (1) we are convinced of the wisdom of changing our manufacturing methods rather than treating the effects of a pollution generating process; (2) our work environment would be healthier and safer for our employees; (3) reduced solvent content coatings constitute the emerging technology in our industry; and, (4) we believe that it will ultimately be less expensive.

Unfortunately, the time constraints imposed by our permit will not allow us to evaluate fully the most recent low solvent content coating formulated for us by PDI and, should it prove to be unacceptable, have sufficient time remaining to contract for the installation of a pollution control device by January 1993.

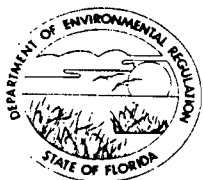
You indicated that after you had a chance to review the PDI letter you would contact me to continue our dialogue on this subject. I welcome that opportunity and look forward to hearing from you in the near future.

Sincerely,


Dudley J. Gordon
President



posure



State of Florida
DEPARTMENT OF ENVIRONMENTAL REGULATION

For Routing To Other Than The Addressee	
To: _____	Location: _____
To: _____	Location: _____
To: _____	Location: _____
From: _____	Date: _____

Interoffice Memorandum

TO: Steve Smallwood
FROM: Clair Fancy *CF*
DATE: March 25, 1992
SUBJ: Amendment to Construction Permit No. AC 05-166484
Macho Products, Inc.

Attached for your approval and signature is a letter modifying the above permit by extending the time for compliance. The company is working with a supplier of new technology to develop a water-based coating process for their martial arts products. The amendment will allow them time for conversion of their existing solvent-based coating process.

The Bureau recommends approval of this amendment.

CF/JR/plm

Attachment

OK
OK JR
3-27-92

RECEIVED
DER - MAIL ROOM
1992 MAR 13 PM 1:20



March 9, 1992

CERTIFIED MAIL

Mr. C.H. Fancy, P.E.
Chief
Bureau of Air Regulation
Florida Department of Environmental Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Dear Mr. Fancy,

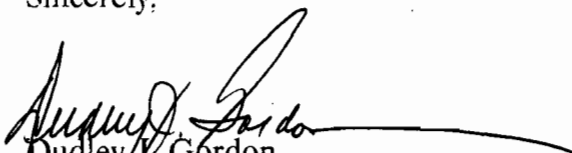
Re: Permit AC 05-166484, Request for Extension of Time to Comply

Thank you for your letter of February 27, 1992 pertaining to reference.

Enclosed is our check in the amount of \$50 to cover the fee for processing the amendment to our existing permit.

We appreciate your assistance with this matter.

Sincerely,


Dudley J. Gordon
President

DJG:jb

Enclosure

J. Reynolds

001031



MACHO PRODUCTS, INC. 122088
OPERATING ACCOUNT
PHONE 407-729-6137
2550 KIRBY AVENUE, N.E.
PALM BAY, FL 32905-3494

08211

63-215/631
BRANCH 838

March 9 1992

PAY TO THE ORDER OF Florida Department of Environmental Regulation \$ 50.00
ifty and 00/100 DOLLARS

 SunBank, N.A.
Palm Bay Office 838
Palm Bay, FL 32905
SunService Center (407) 639-4786

FOR Permit AC 05-166484 Request for extension of time to comply
[Redacted]

Mr. C.H. Fancy, P.E.
Chief
Bureau of Air Regulation
Florida Department of Environmental Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Dear Mr. Fancy,


Re: Permit AC 05-166484, Request for Extension of Time to Comply

Thank you for your letter of February 27, 1992 pertaining to reference.

Enclosed is our check in the amount of \$50 to cover the fee for processing the amendment to our existing permit.

We appreciate your assistance with this matter.

Sincerely,


Dudley V. Gordon
President

DJG;jb

Enclosure

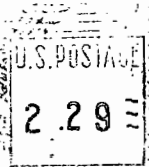
001031



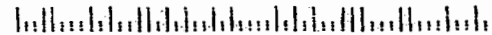


MACHO PRODUCTS, INC.
2550 Kirby Ave. N.E. • Palm Bay, FL
32905-3494 USA

CERTIFIED
P 717 276 796
MAIL



Mr. C.H. Fancy, P.E.
Chief
Bureau of Air Regulation
Florida Department of Environmental Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, FL 32399-2400



SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt Fee will provide you the signature of the person delivered to and the date of delivery.

I also wish to receive the following services (for an extra fee):

- 1. Addressee's Address
- 2. Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
 Mr. Dudley J. Gordon, Pres.
 Macho Products, Inc.
 2550 Kirkby Ave
 Palm Bay, FL 32905

4a. Article Number
P 617 884 149

4b. Service Type
 Registered Insured
 Certified COD
 Express Mail Return Receipt for Merchandise

7. Date of Delivery
3/9/92

5. Signature (Addressee)
 [Signature]

8. Addressee's Address (Only if requested and fee is paid)

6. Signature (Agent)

P 617 884 149

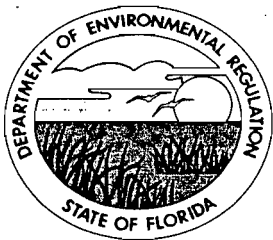


Certified Mail Receipt

No Insurance Coverage Provided
 Do not use for International Mail
 (See Reverse)

Service to	Dudley J. Gordon, Pres.
Street & No.	Macho Products
P.O., State & ZIP Code	Palm Bay, FL
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Address of Delivery	
TOTAL Postage & Fees	\$
Postmark or Date	3-5-92 AC 05-166484

PS Form 3800, June 1990



Florida Department of Environmental Regulation

Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400

Lawton Chiles, Governor

Carol M. Browner, Secretary

February 27, 1992

Mr. Dudley J. Gordon, President
Macho Products, Inc.
2550 Kirby Avenue
Palm Bay, Florida 32905

Dear Mr. Gordon:

Re: Permit AC 05-166484, Request for Extension of Time to Comply

This is in response to your February 19 letter requesting additional time to comply with Specific Condition No. 4 of the above permit. The Department will agree to extend the time necessary for pollution equipment installation or process conversion but will require evidence before January 1, 1993, that Macho Products has entered into a contract with a supplier to carry out either Specific Condition No. 4.a. or 4.b.. Also required before January 1, 1993, will be a compliance schedule indicating completion of construction/conversion no later than July 1, 1994. These permit amendments would be included in a new Specific Condition No. 4.c.:

4.c. In the event that neither 4.a. nor 4.b. above is carried out to completion before January 1, 1993, the permittee shall submit evidence to the Department before said date showing that permittee has entered into a contract with a supplier to carry out No. 4.a. or 4.b. to completion, and also a schedule showing the dates on which installation will begin and end, with completion occurring not later than July 1, 1994.

If you would like for us to proceed with this amendment, please forward the required \$50 fee to this office.

Sincerely,

C. H. Fancy, P.E.
Chief
Bureau of Air Regulation

CHF/jr

c: C. Collins, CD
S. Mayberry, COM

DARM

Work Assignment # Fb-01

(See DARM Operations Plan for Instructions)



TO: Clair Fancy

Assigned 2/4/92

Reynolds Brooks
both out today (th)

Review (2/10/92)

Due 2/7/92

THRU: AAA

FROM: Steve Smallwood

SUBJ: Macho Products VOC
Permit - Brevard co

MODULE: Air Permitting 2052

ASSIGNMENT:

668-7685 (1) Talk to John Reynolds about this permit. Mayberry said the company has been very complimentary about how John has handled this. Thank John for me.

(2) Talk to Stephen Brooke about this.

(3) Talk to the owner: General Dudley Gordon (407) 729-6137 (over) →

COMMENT(S):

Steve Mayberry, Director, Economic Development FL Dept of Commerce called me about this. Please call him @ 8-6360 Friday and give him a follow up report on this.

DARM

Work Assignment

(Back Page)



Determine what needs to be done to get the best outcome for this situation.

④ Initiate whatever action you determine appropriate and tell me what the situation is and what you're doing about it.

⑤ Call Steve Mayberry (see Enroute) and give him an update.

Note: Steve tells me that Patty Kurth the state representative from that area called him about this. She is on the House Commerce Committee. The company makes police uniforms and products. They use plastic-covered form that requires 5 solvent dips. They have been to install control equipment. Uniroyal is coming out with a new 1 dip process that might comply without add-on controls. Gordon needs to decide within the next few months which way to go. He needs to know if he can

have a few more months to fully comply so he can consider the pollution prevention options. Please determine what the facts are.

MACHO Products

2/18/92

John - Reynolds says: A couple years ago Macho applied for a permit to install a collection system of hoods/ducts and vent it to a stack. (w/o destruction). Bill Thomas and John questioned this and put them on a 3 year research to eventually find a satisfactory method of control. We have been receiving quarterly reports about their progress. Apparently, some confidential reports and SSER may have others.

Stephanie Brooks says:

GM - Dony Gordon says:

Sen Kurok is concerned about Commerce and MACHO Products Challenge - Air Permit Make Police protective equipment which has Toluene as solvent. By January 1993 DDE requires them to have either a low solvent content coating or a method of destruction. Plastic dips hopes to have a water solvent based coating. This would allow 2 water and 2 solvent dips (achievable 50% reduction (170TPY actual now)). To gain another 20% (mid 1994). (over)

If MACHO installs controls they
are uncertain of Capture efficiency
and destruction efficiency. Companies

seem to provide 60-80% and

90%

MR Gordon plans to send me a letter
from the vendor of the water solvent
products about the schedule, feasibility
and cost of using it.

MR Gordon and I will discuss this further
2/19/92

B. L. Linn



MACHO PRODUCTS, INC.

May 18, 1990

Bureau of Air Regulation
ATTENTION JOHN REYNOLDS
Florida Department of Environmental Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Dear Sirs,

Macho Products is concerned that information be disclosed by the DER which might advantage a potential competitor. In regards to our permit, we feel that Specific Conditions 2 and 5 of our permit provide information which might allow a competitor to draw conclusions about Macho's productive capacity and future intentions. We would like to request confidentiality of these points.

We appreciate your cooperation in this matter.

Sincerely,

Rick Hathway

RH;jb

RECEIVED

MAY 25 1990

DER - DAQ/m



MACHO PRODUCTS, INC.

October 17, 1989

Mr. Bill Thomas
Bureau of Air Regulation
Florida Dept. of Environmental Regulation
Twin Towers Office Bldg.
2600 Blair Stone Road
Tallahassee, Fl. 32399-2400

RECEIVED

OCT 20 1989

DER-BAQM

Dear Sir

We received the following documents regarding air permit AC 0166484 on Oct. 4:

Notice of Intent to Issue
Technical Evaluation and Preliminary Determination
Draft Permit Including General and Specific Conditions

The cover letter asks that we submit any written comments concerning the Department's proposed action to yourself. While we are grateful for the work you have done, there are several comments we wish to make.

Technical Evaluation and Preliminary Determination

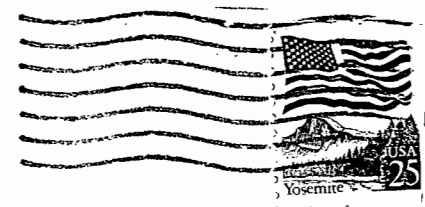
The section states that "VOC emissions are controllable at moderate cost through catalytic incineration". We submitted an abridged concept engineering report entitled "Comparison of Alternative Techniques for VOC Control". The estimated cost of catalytic incineration was a capital cost of \$156,000 and yearly operating cost of \$89,000. Our net profit over the last four years was \$386,911. The estimated cost of installing and operating a catalytic incineration system for four years would be \$512,000. I think you would agree that such costs could threaten the existence of an enterprise of our size.

The section states that "one of the following steps must be carried out before January 1, 1993; (1) installation of a state-of-the-art pollution control device for VOC emissions, or (2) conversion to a water-based or other non-volatile coating process."

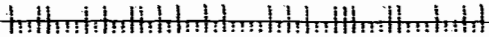
We will continue to look at water-based and low-solvent coatings. At this point, to the best of our knowledge, there is no water-based or low-solvent coating suitable for our product.



PRODUCTS, INC. 2550 Kirby Avenue, N.E.
Palm Bay, FL 32905-3494



Mr. Bill Thomas
Bureau of Air Regulation
Florida Dept. of Environmental Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, FL 32399-2400



Other alternatives may exist which lead to emission reduction. The following are examples.

Injection molding may offer technology for our product. It produces minimal VOC emissions. While it requires a large capital outlay for machinery and dies, it may be suitable for high volume items. We would continue to produce low volume items and do product development using current technology. Such a course would produce significant reductions in solvent use and VOC emissions. In pursuing such a course, it might not be economically feasible to install an emission reduction device.

Reduction of VOC emissions may also be achieved by installing package emission reduction units on various segments of our operation. Such a procedure may be more cost-effective than a single high-volume waste airstream.

Draft Permit: Specific Conditions

Point 4. a. of the section refers to "a state-of-the-art pollution control device limiting VOC emissions to 10.0 lbs per hour (based on 95% efficiency): 80 lbs pr day (30 day average)." This may be a reasonable figure for destruction efficiency, but may not be a reasonable figure for overall efficiency depending on the cost of capture.

We appreciate your consideration of these comments.

Sincerely



Richard Hathaway, Systems Manager

Copies: DER file
Frank Cross
Dud Gordon

File: permit disk s1

copied: J. Reynolds
C. Collins
CHF/BT

SENDER: Complete items 1 and 2 when additional services are desired, and complete items 3 and 4. Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested.

1. Show to whom delivered, date, and addressee's address. (Extra charge) 2. Restricted Delivery (Extra charge)

3. Article Addressed to:
 Mr. Dudley J. Gordon
 President
 Macho Products, Inc.
 2550 Kirby Ave.
 Palm Bay, FL 32905

4. Article Number
 P 938 762 761

Type of Service:
 Registered Insured
 Certified COD
 Express Mail Return Receipt for Merchandise

Always obtain signature of addressee or agent and **DATE DELIVERED**.

5. Signature - Address
 X *Machon Lass*

6. Signature - Agent
 X

7. Date of Delivery
 11-27-89

8. Addressee's Address (ONLY if requested and fee paid)

PS Form 3811, Mar. 1988 * U.S.G.P.O. 1988-212-865 DOMESTIC RETURN RECEIPT

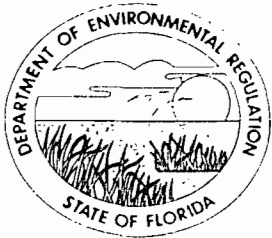
P 938 762 761

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED
 NOT FOR INTERNATIONAL MAIL
 (See Reverse)

Sent to Mr. Dudley J. Gordon, Macho	
Street and No. Products 2550 Kirby Ave.	
P.O., State and ZIP Code Palm Bay, FL 32905	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt showing to whom and Date Delivered	
Return Receipt showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	\$
Postmark or Date Mailed: 11-22-89 Permit: AC 05-166484	

PS Form 3800, June 1985



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

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION NOTICE OF PERMIT

Mr. Dudley J. Gordon, President
Macho Products, Inc.
2550 Kirby Avenue
Palm Bay, Florida 32905


November 20, 1989

Enclosed is construction permit No. AC 05-166484 for Macho Products, Inc. to install an exhaust duct system for the vinyl dipping operation at their facility in Palm Bay, Brevard County, Florida. This permit is issued pursuant to Section 403, Florida Statutes.

Any party to this permit has the right to seek judicial review of the permit pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date this permit is filed with the Clerk of the Department.

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION



C. H. Fancy, P.E.
Chief
Bureau of Air Regulation

Copy furnished to:

C. Collins, Central District
F. Cross, Jr., P.E.

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this NOTICE OF PERMIT and all copies were mailed before the close of business on 11-22-89.

FILING AND ACKNOWLEDGEMENT
FILED, on this date, pursuant to
§120.52(9), Florida Statutes, with
the designated Department Clerk,
receipt of which is hereby
acknowledged.

Howard John
Clerk

11-22-89
Date

Final Determination

Macho Products, Inc.
Brevard County
Palm Bay, Florida

Exhaust Duct System for
Vinyl Coating Facility

Permit No. AC 05-166484

Florida Department of Environmental Regulation
Division of Air Resources Management
Bureau of Air Regulation

November 14, 1989

Final Determination

The construction permit application has been reviewed by the Department. Public notice of the Department's Intent to Issue was published in the Florida Today on October 20, 1989. The Technical Evaluation and Preliminary Determination were available for public inspection at the DER's Central District office in Orlando and the DER's Bureau of Air Regulation office in Tallahassee.

Comments were received during the public notice period. The applicant's October 17 letter stated that, although air pollution expenditures would jeopardize profits, they will pursue alternatives including injection molding and segmented emission reduction units. During a followup phone call on October 26, the applicant agreed to submit quarterly reports to the Bureau of Air Regulation briefly summarizing progress in deciding on a course of action. Therefore, the final action of the Department will be to issue the permit as drafted with the added requirement of quarterly progress reporting.



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.

PERMITTEE:
Macho Products, Inc.

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

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.

PERMITTEE:
Macho Products, Inc.

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

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.

PERMITTEE:
Macho Products, Inc.

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

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.

PERMITTEE:
Macho Products, Inc.

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

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, Secretary



RECEIVED

State of Florida
NOV 14 1989
DEPARTMENT OF ENVIRONMENTAL REGULATION

For Routing To Other Than The Addressee	
To: _____	Location: _____
To: _____	Location: _____
To: _____	Location: _____
From: _____	Date: _____

Interoffice Memorandum

TO: Dale Twachtmann

for FROM: Steve Smallwood *attorney*

DATE: November 14, 1989

SUBJ: Approval of Construction Permit No. AC 05-166484
Macho Products, Inc.

Attached for your approval and signature is a permit prepared by Central Air Permitting for the above mentioned company to install an exhaust duct system for the vinyl dipping operation at their facility in Palm Bay, Florida.

Comments were received during the public notice period.

Day 90, after which the permit will be issued by default, is November 28, 1989.

I recommend your approval and signature.

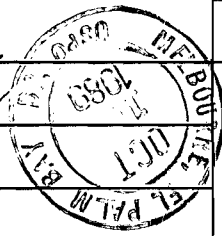
SS/JR/t

attachments

● **SENDER:** Complete items 1 and 2 when additional services are desired, and complete items 3 and 4.
 Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested.

1. Show to whom delivered, date, and addressee's address. (Extra charge) 2. Restricted Delivery (Extra charge)

3. Article Addressed to: Mr. Dudley J. Gordon, President Macho Products, Inc. 2550 Kirby Avenue Palm Bay, Florida 32905	4. Article Number P 938 762 705 Type of Service: <input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail <input type="checkbox"/> Return Receipt for Merchandise Always obtain signature of addressee or agent and <u>DATE DELIVERED</u> .
5. Signature - Address X <i>Meghan P. Hoff</i>	8. Addressee's Address (ONLY if requested and fee paid)
6. Signature - Agent X	
7. Date of Delivery	

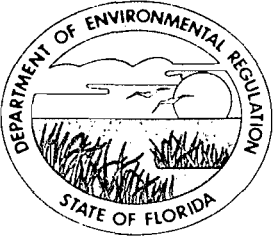


PS Form 3811, Mar. 1988 * U.S.G.P.O. 1988-212-865 DOMESTIC RETURN RECEIPT

P 938 762 705
RECEIPT FOR CERTIFIED MAIL
 NO INSURANCE COVERAGE PROVIDED
 NOT FOR INTERNATIONAL MAIL
 (See Reverse)

Sent to Mr. Dudley J. Gordon, Macho	
Street and No. 2550 Kirby Avenue Products	
P.O., State and ZIP Code Palm Bay, FL 32905	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt showing to whom and Date Delivered	
Return Receipt showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	\$
Postmark or Date Mailed: 10-5-89 Permit: AC 05-166482	

PS Form 3800, June 1985



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

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION
NOTICE OF PERMIT

Mr. Dudley J. Gordon, President
Macho Products, Inc.
2550 Kirby Avenue
Palm Bay, Florida 32905

October 4, 1989

Enclosed is construction permit No. AC 05-166482 for Macho Products, Inc., to install a hot water generator at their facility in Palm Bay, Brevard County, Florida. This permit is issued pursuant to Section 403, Florida Statutes.

Any party to this permit has the right to seek judicial review of the permit pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date this permit is filed with the Clerk of the Department.

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION

C. H. Fancy, P.E.
Bureau of Air Regulation

Copy furnished to:

C. Collins, Central District
F. Cross, Jr., P.E.

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this NOTICE OF PERMIT and all copies were mailed before the close of business on 10-5-89.

FILING AND ACKNOWLEDGEMENT
FILED, on this date, pursuant to
§120.52(9), Florida Statutes, with
the designated Department Clerk,
receipt of which is hereby
acknowledged.

Lyn D. Joken
Clerk

10-5-89
Date

Final Determination

Macho Products Inc.
Brevard County
Palm Bay, Florida

Hot Water Generator
Permit Number: AC 05-166482

Florida Department of Environmental Regulation
Division of Air Resources Management
Bureau of Air Regulation

September 29, 1989

Final Determination

The construction permit application has been reviewed by the Department. Public notice of the Department's Intent to Issue was published in the Florida Today on August 23, 1989. The Technical Evaluation and Preliminary Determination were available for public inspection at the DER's Central District office in Orlando and the DER's Bureau of Air Regulation office in Tallahassee.

No comments were received during the public notice period. Therefore, the final action of the Department will be to issue the construction permit as drafted.



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 05-166482
Expiration Date: March 31, 1990
County: Brevard
Latitude/Longitude: 28°02'21"N
80°35'33"W
Project: Hot Water Generator

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rule(s) 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 a hot water generator. 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 constructed 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.

PERMITTEE:
Macho Products, Inc.

Permit No. AC 05-166482
Expiration Date: March 31, 1990

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.

PERMITTEE:
Macho Products, Inc.

Permit No. AC 05-166482
Expiration Date: March 31, 1990

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.

PERMITTEE:
Macho Products, Inc.

Permit No. AC 05-166482
Expiration Date: March 31, 1990

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.

PERMITTEE:
Macho Products, Inc.

Permit No. AC 05-166482
Expiration Date: March 31, 1990

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. The hot water generator shall be fired with No. 2 fuel oil or diesel fuel at a maximum heat input rate of 0.56 MMBtu/hr and containing no more than 0.5 percent (wt.) sulfur.

5. 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).

6. 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

PERMITTEE:
Macho Products, Inc.

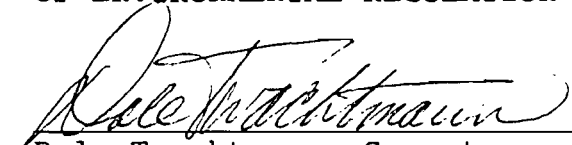
Permit No. AC 05-166482
Expiration Date: March 31, 1990

SPECIFIC CONDITIONS:

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 2 day
of October, 1989

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION


Dale Twachtmann, Secretary



State of Florida
DEPARTMENT OF ENVIRONMENTAL REGULATION

For Routing To Other Than The Addressee	
To: _____	Location: _____
To: _____	Location: _____
To: _____	Location: _____
From: _____	Date: _____

Interoffice Memorandum

TO: Dale Twachtmann

for FROM: Steve Smallwood *cajancy*

DATE: September 29, 1989

SUBJ: Approval of Construction Permit No. AC 05-166482
Macho Products Inc.

Attached for your approval and signature is a permit prepared by Bureau of Air Regulation for the above mentioned company to install a hot water generator at their facility in Palm Bay, Florida.

No comments were received during the public notice period.

Day 90, after which this permit will be issued by default, is October 12, 1989.

I recommend your approval and signature.

SS/JR/t

attachments

APPROVED

SFP 29 1989

Office of the Secretary



MACHO PRODUCTS, INC. FAX# (407) 768-2598

10/26/89

8-1344

PLEASE DELIVER THE FOLLOWING PAGE(S) TO:

NAME: Patty Adams, DER

COMPANY: _____

FAX NUMBER: 904 487 4938

TOTAL NUMBER OF PAGES: 2

FROM: Rich Hathaway

IF YOU DID NOT RECEIVE ALL PAGES, PLEASE ADVISE AS SOON AS POSSIBLE. OUR TELEPHONE NUMBER IS (407)-729-6137

COMMENTS: This is a fax of the notice of publication sent

please call me if further notice is needed.

CAPE PUBLICATIONS, INC.

BEST AVAILABLE COPY

BEST AVAILABLE COPY

The Times

Published Weekly on Wednesdays

THE TRIBUNE

Published Weekly on Wednesdays

STAR-ADVOCATE

Published Weekly on Wednesdays



Published Daily

STATE OF FLORIDA
COUNTY OF BREVARD

Before the undersigned authority personally appeared Linda L. Spicer who on oath says that he/she is Legal Advertising Clerk of the FLORIDA TODAY, a newspaper published in Brevard County, Florida; that the attached copy of advertising being a Legal Notice

_____ in the matter of _____
permit to Macho Products, Inc.

_____ in the _____ Court

was published in the FLORIDA TODAY NEWSPAPER
in the issues of October 20, 1989

Affiant further says that the said FLORIDA TODAY NEWSPAPER is a newspaper published in said Brevard County, Florida and that the said newspaper has heretofore been continuously published in said Brevard County, Florida regularly as stated above, and has been entered as second class mail matter at the post office in COCOA, said Brevard County, Florida for a period of one year next preceeding the first publication of the attached copy of advertisement; and affiant further says that he has neither paid nor promised any person, firm or corporation any discount, rebate, commission or refund for the purpose of securing this advertisement for publication in said newspaper.

Linda L. Spicer

Sworn and subscribed to before me this

20th October 89
day of _____ A.D., 19

Cathy Steele
State of Florida at Large
My Commission Expires March 29, 1990

Department of Environmental Regulation
The Department of Environmental Regulation
has received a petition from Macho Products, Inc., 2150 Kirby Avenue, Palm Bay, Florida 32909, for the revocation of their permit to operate their facility in Palm Bay, Brevard County, Florida. A determination of Best Available Control Technology (BACT) was not required. The Department is issuing this notice to issue for the reasons stated in the Technical Evaluation and Preliminary Determination.
A person whose substantial interests are affected by the Department's proposed permit decision may petition for an administrative hearing (hearing) in accordance with section 120.57, Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 1600 Blair Stone Road, Tallahassee, Florida 32399-2408, within fourteen (14) days of publication of this notice. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under section 120.57, Florida Statutes.
The petition shall contain the following information:
(a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Department Permit File Number, and the county in which the permit is proposed;
(b) A statement of how and when each petitioner received notice of the Department's action or proposed action;
(c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action;
(d) A statement of the material facts disclosed by petitioner, if any;
(e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action;
(f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action; and
(g) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with regard to the permit decision or proposed action.
If a hearing is requested, an administrative hearing process is required to formulate a final decision. Accordingly, if the Department's final action may be taken from the position taken by it in this notice, persons whose substantial interests will be affected by any decision of the Department will be heard in the petition to become a party to the proceedings. The petition must conform to the requirements specified above and be filed (received) within 14 days of publication of this notice in the Office of General Counsel of the above address of the Department. Failure to petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under section 120.57, Florida Statutes.
The Department's records will be open for public inspection during the normal business hours, 9:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, in the Department of Environmental Regulation, 1600 Blair Stone Road, Tallahassee, Florida 32399-2408.

SENDER: Complete items 1 and 2 when additional services are desired, and complete items 3 and 4.
 Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested.

1. Show to whom delivered, date, and addressee's address. (Extra charge) 2. Restricted Delivery (Extra charge)

3. Article Addressed to: Mr. Dudley J. Gordon, President Macho Products, Inc. 2550 Kirby Avenue Palm Bay, FL 32905	4. Article Number P 938 762 699
	Type of Service: <input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail <input type="checkbox"/> Return Receipt for Merchandise
Always obtain signature of addressee or agent and DATE DELIVERED.	
5. Signature - Addressee X <i>Meghan Stoff</i>	8. Addressee's Address (ONLY if requested and fee paid)
6. Signature - Agent X	
7. Date of Delivery	

PS Form 3811, Mar. 1988 * U.S.G.P.O. 1988-212-865 DOMESTIC RETURN RECEIPT

P 938 762 699

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED
 NOT FOR INTERNATIONAL MAIL
 (See Reverse)

Sent to Mr. Dudley J. Gordon, Macho	
Street and No. 2550 Kirby Aven	
P.O., State and ZIP Code Palm Bay, FL 32905	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt showing to whom and Date Delivered	
Return Receipt showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	\$
Postmark or Date Permit: AC 05-166484 Mailed: 10-2-89	

PS Form 3800, June 1985



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

September 27, 1989

CERTIFIED MAIL-RETURN RECEIPT REQUESTED

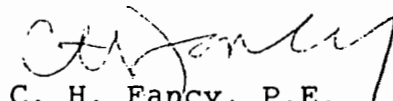
Mr. Dudley J. Gordon, President
Macho Products, Inc.
2550 Kirby Avenue
Palm Bay, Florida 32905

Dear Mr. Gordon:

Attached is one copy of the Technical Evaluation and Preliminary Determination and proposed permit for installation of an exhaust duct system for the vinyl dipping operation at your facility in Palm Bay, Florida.

Please submit any written comments you wish to have considered concerning the Department's proposed action to Mr. Bill Thomas of the Bureau of Air Regulation.

Sincerely,


C. H. Fancy, P.E.
Bureau of Air Regulation

CHF/JR/plm

Attachments

cc: C. Collins, Central District
F. Cross, Jr., P.E.

BEFORE THE STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

In the Matter of
Application for Permit by:

Macho Products, Inc.
2550 Kirby Avenue
Palm Bay, FL 32905

DER File No. AC 05-166484

INTENT TO ISSUE

The Department of Environmental Regulation hereby gives notice of its intent to issue a permit (copy attached) for the proposed project as detailed in the application specified above. The Department is issuing this Intent to Issue for the reasons stated in the attached Technical Evaluation and Preliminary Determination.

The applicant, Macho Products, Inc., applied on July 25, 1989, to the Department of Environmental Regulation for a permit to install an exhaust duct system for the vinyl dipping operation at their facility in Palm Bay, Brevard County, Florida.

The Department has permitting jurisdiction under Chapter 403, Florida Statutes, and Florida Administrative Code Rules 17-2 and 17-4. The project is not exempt from permitting procedures. The Department has determined that an air construction permit is required for the proposed work.

Pursuant to Section 403.815, F.S. and DER Rule 17-103.150, F.A.C., you (the applicant) are required to publish at your own expense the enclosed Notice of Intent to Issue Permit. The notice shall be published one time only within 30 days, in the legal ad section of a newspaper of general circulation in the area affected. For the purpose of this rule, "publication in a newspaper of general circulation in the area affected" means publication in a newspaper meeting the requirements of Sections 50.011 and 50.031, F.S., in the county where the activity is to take place. The applicant shall provide proof of publication to the Department, at the address specified within seven days of publication. Failure to publish the notice and provide proof of publication within the allotted time may result in the denial of the permit.

The Department will issue the permit with the attached conditions unless a petition for an administrative proceeding (hearing) is filed pursuant to the provisions of Section 120.57, F.S.

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. Petitions filed by the permit applicant and the parties listed below must be filed within 14 days of receipt of this intent. Petitions filed by other persons must be filed within 14 days of publication of the public notice or within 14 days of receipt of this intent, whichever first occurs. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, Florida Statutes.

The Petition shall contain the following information;

(a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed;

(b) A statement of how and when each petitioner received notice of the Department's action or proposed action;

(c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action;

(d) A statement of the material facts disputed by Petitioner, if any;

(e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action;

(f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action; and


(g) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action or proposed action.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this notice. Persons whose substantial interests will be affected by any decision of the Department with regard to the application(s) have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of publication of this notice in the Office in General Counsel at the above address of the Department. Failure to petition within the allowed time frame constitutes a waiver of any right such

person has to request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-5.207, F.A.C.

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION

A handwritten signature in black ink, appearing to read "C. H. Fancy", is written over a horizontal line.

C. H. Fancy, P.E.
Bureau of Air Regulation

Copies furnished to:

C. Collins, Central District
F. Cross, Jr., P.E.

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this NOTICE OF INTENT TO ISSUE and all copies were mailed before the close of business on 10-2-89.

FILING AND ACKNOWLEDGEMENT
FILED, on this date, pursuant to
§120.52(9), Florida Statutes, with
the designated Department Clerk,
receipt of which is hereby
acknowledged.

Karin Baker
Clerk

10-2-89
Date

State of Florida
Department of Environmental Regulation
Notice of Intent to Issue

The Department of Environmental Regulation hereby gives notice of its intent to issue a permit to Macho Products, Inc., 2550 Kirby Avenue, Palm Bay, Florida 32905, to install an exhaust duct system for the vinyl dipping operation at their facility in Palm Bay, Brevard County, Florida. A determination of Best Available Control Technology (BACT) was not required. The Department is issuing this Intent to Issue for the reasons stated in the Technical Evaluation and Preliminary Determination.

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, within fourteen (14) days of publication of this notice. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, Florida Statutes.

The Petition shall contain the following information;

- (a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed;
- (b) A statement of how and when each petitioner received notice of the Department's action or proposed action;
- (c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action;
- (d) A statement of the material facts disputed by Petitioner, if any;
- (e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action;
- (f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action; and
- (g) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action or proposed action.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the

Department's final action may be different from the position taken by it in this Notice. Persons whose substantial interests will be affected by any decision of the Department with regard to the application have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of publication of this notice in the Office of General Counsel at the above address of the Department. Failure to petition within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-5.207, F.A.C.

The application is available for public inspection during business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at:

Department of Environmental Regulation
Bureau of Air Regulation
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Department of Environmental Regulation
Central District
3319 Maguire Blvd., Suite 232
Orlando, Florida 32803-3767

Any person may send written comments on the proposed action to Mr. Bill Thomas at the Department's Tallahassee address. All comments mailed within 14 days of the publication of this notice will be considered in the Department's final determination.

Technical Evaluation
and
Preliminary Determination

Macho Products, Inc.
Brevard County
Palm Bay, Florida

Exhaust Duct System for
Vinyl Coating Facility
Permit No. AC 05-166484

Florida Department of Environmental Regulation
Division of Air Resources Management
Bureau of Air Regulation

September 27, 1989

I. Application

A. Applicant

Macho Products, Inc.
2550 Kirby Avenue
Palm Bay, Florida 32905

B. Request

The Department received an application on June 19, 1989, for a permit to construct an exhaust system for a vinyl coating facility at the applicant's site in Palm Bay, Florida. After receipt of additional information on July 25, the application was deemed complete on August 24, 1989.

C. Location/Classification

The applicant's martial arts equipment manufacturing facility (SIC Code 3949) is located on the west side of Palm Bay with latitude and longitude of 28°02'21"N and 80°35'33"W, respectively. The UTM coordinates of the site are: Zone 17, 539.8 km E and 3,101.4 km N.

II. Project Description/Emissions

It is proposed to construct an exhaust duct system for a vinyl coating facility in which pre-cut foam martial arts equipment is glued and dried, then dipped into a vinyl coating and dried in a heat tunnel oven. The applicant proposes to install a ducted hood over the existing glue dryer conveyor belt and connect it to a new 10 inch duct from the existing dipping bay heat tunnel oven. Plans call for the 10 inch common duct to be routed outside the building and connected to a new exhaust fan and 45 foot stack for dispersion.

While particulate emissions are insignificant, the total Volatile Organic Compound (VOC) emissions from the glue drying process and paint dipping operation are 205.5 tons per year. The Department believes that a control device should be added to reduce these emissions, however, the applicant contends that an air pollution control device should not be required since modeled ground level concentrations are below 1/100 of the VOC Threshold Limit Values (TLVs). Typically, the Department may grant a permit without requiring a pollution control device if the emissions are insignificant or, in the case of an existing source, emissions are impractical to collect and control due to the facility's layout or design. In this instance the VOC emissions are significant and are being collected in a new exhaust duct system. These VOC emissions are controllable at moderate cost through catalytic incineration. The Department's authority for requiring a control device is Rule 17-2.620(1)(a),

Florida Administrative Code, which states: "No person shall store, pump, handle, process, load, unload or use in any process or installation volatile organic compounds or organic solvents without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department." The applicant's objection to control equipment on the ground of economic hardship will be considered by allowing construction with the condition that one of the following steps must be carried out before January 1, 1993: (1) installation of a state-of-the-art pollution control device for VOC emissions, or (2) conversion to a water-based or other non-volatile coating process.

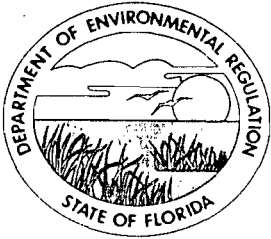
III. Rule Applicability

The construction permit application is subject to review under Chapter 403, Florida Statutes, and Florida Administrative Code (F.A.C.) Chapters 17-2 and 17-4. The facility is located in an area classified as attainment for all of the regulated air pollutants. Applicable rules are F.A.C. Rule 17-2.520, Sources not Subject to Prevention of Significant Deterioration or Nonattainment Requirements; F.A.C. Rule 17-2.610, General Particulate Emission Limiting Standards; and F.A.C. Rule 17-2.620, General Pollutant Emission Limiting Standards.

IV. Conclusion

Based on the information provided by Macho Products, Inc., the Department has reasonable assurance that the proposed construction/installation of an exhaust duct system for the vinyl coating facility, as described in this evaluation and subject to the conditions proposed herein, will not cause or contribute to a violation of any air quality standard, PSD increment, or any other technical provision of Chapter 17-2 of the Florida Administrative Code.





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 Rule(s) 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.

PERMITTEE:
Macho Products, Inc.

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

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.

PERMITTEE:
Macho Products, Inc.

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

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.

PERMITTEE:
Macho Products, Inc.

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

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.

PERMITTEE:
Macho Products, Inc.

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

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 approved by the Bureau of Air Regulation.

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 _____ day
of _____, 1989

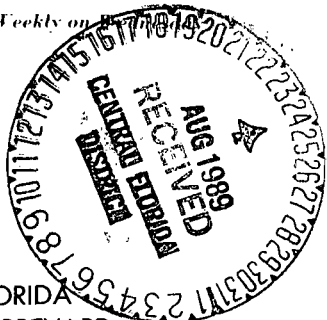
STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION

Dale Twachtmann, Secretary

CAPE PUBLICATIONS, INC.

The Times

Published Weekly on _____



THE TRIBUNE

Published Weekly on Wednesday



Published Daily

STATE OF FLORIDA
COUNTY OF BREVARD

Before the undersigned authority personally appeared Linda L. Spicer who on oath says that he/she is Legal Advertising Clerk

of the FLORIDA TODAY, a newspaper published in Brevard County, Florida; that the attached copy of advertising being a Notice of Intent to Issue

_____ in the matter of _____ permit to Macho Products, Inc.

_____ in the _____ Court

was published in the FLORIDA TODAY NEWSPAPER August 23, 1989 in the issues of _____

Affiant further says that the said FLORIDA TODAY NEWSPAPER is a newspaper published in said Brevard County, Florida and that the said newspaper has heretofore been continuously published in said Brevard County, Florida regularly as stated above, and has been entered as second class mail matter at the post office in COCOA, said Brevard County, Florida for a period of one year next preceeding the first publication of the attached copy of advertisement; and affiant further says that he has neither paid nor promised any person, firm or corporation any discount, rebate, commission or refund for the purpose of securing this advertisement for publication in said newspaper.

Linda L. Spicer
Sworn and subscribed to before me this _____

23rd _____ 89
day of _____, 19 _____

Calley J. S. [Signature]
Notary Public
State of Florida, of Large
My Commission Expires March 29, 1992

State of Florida
Department of
Environmental Regulation
Notice of Intent to Issue
The Department of Environmental Regulation hereby gives notice of its intent to issue a permit to Macho Products, Inc., 2550 Kirby Avenue, Palm Bay, Florida 32905, to install a hot water generator at their facility in Palm Bay, Brevard County, Florida. A determination of Best Available Control Technology (BACT) was not required. The Department is issuing this intent to issue for the reasons stated in the Technical Evaluation and Preliminary Determination.
A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, within fourteen (14) days of publication of this notice. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, Florida Statutes.
The petition shall contain the following information:
(a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed;
(b) A statement of how and when each petitioner received notice of the Department's action or proposed action;
(c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action;
(d) A statement of the material facts disputed by Petitioner, if any;
(e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action;
(f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action; and
(g) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action or proposed action.
If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this Notice. Persons whose substantial interests will be affected by any decision of the Department with regard to the application have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of publication of this notice in the Office of General Counsel at the above address of the Department. Failure to petition within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-5.207, F.A.C.
The application is available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday except legal holidays, at: Department of Environmental Regulation
Bureau of Air Quality Management
2600 Blair Stone Road
Tallahassee, Florida 32399-2400
Dept. of Environmental Regulation
Central District
3319 Maquire Blvd., Suite 232
Orlando, Florida 32803-3767
Any person may send written comments on the proposed action to Mr. Bill Thomas at the Department's Tallahassee address. All comments mailed within 14 days of the publication of this notice will be considered in the Department's final determination.
T0099640-1T-8/23, 1989
Wednesday

DEPARTMENT OF ENVIRONMENTAL REGULATION

ROUTING AND TRANSMITTAL SLIP		ACTION NO	
		ACTION DUE DATE	
1. TO: (NAME, OFFICE, LOCATION)		Initial	
<i>JOHN REYNOLDS</i>		Date	
2.		Initial	
<i>AIR RESOURCES</i>		Date	
3.		Initial	
<i>TALLAHASSEE</i>		Date	
4.		Initial	
		Date	

RECEIVED

AUG 28 1989

DER-BAQM

REMARKS:

Mack's Products proof of publication was sent to the Orlando office.

INFORMATION

- Review & Return
- Review & File
- Initial & Forward

DISPOSITION

- Review & Respond
- Prepare Response
- For My Signature
- For Your Signature
- Let's Discuss
- Set Up Meeting
- Investigate & Report
- Initial & Forward
- Distribute
- Concurrence
- For Processing
- Initial & Return

FROM:

*Alan Zahm, PE
Orlando-*


DATE

8/24/89

PHONE

SENDER: Complete items 1 and 2 when additional services are desired, and complete items 3 and 4. Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested.

1. Show to whom delivered, date, and addressee's address. (Extra charge) 2. Restricted Delivery (Extra charge)

3. Article Addressed to: Mr. Dudley J. Gordon, President Macho Products, Inc. 2550 Kirby Avenue Palm Bay, FL 32905	4. Article Number P 938 762 646 Type of Service: <input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail <input type="checkbox"/> Return Receipt for Merchandise Always obtain signature of addressee or agent and DATE DELIVERED.
5. Signature - Address X	8. Addressee's Address (ONLY if requested and fee paid)
6. Signature - Agent X 	
7. Date of Delivery	

PS Form 3811, Mar. 1988 * U.S.G.P.O. 1988-212-865 DOMESTIC RETURN RECEIPT

P 938 762 646

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED
 NOT FOR INTERNATIONAL MAIL
 (See Reverse)

Sent to Mr. Dudley J. Gordon, Macho	
Street and No. Products 2550 Kirby Ave.	
P.O., State and ZIP Code Palm Bay, FL 32905	
Postage	S
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt showing to whom and Date Delivered	
Return Receipt showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	S
Postmark or Date Mailed: 8-11-89 Permit: AC 05-166482	

PS Form 3800, June 1985



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

August 9, 1989

CERTIFIED MAIL-RETURN RECEIPT REQUESTED

Mr. Dudley J. Gordon, President
Macho Products, Inc.
2550 Kirby Avenue
Palm Bay, Florida 32905

Dear Mr. Gordon:

Attached is one copy of the Technical Evaluation and Preliminary Determination and proposed permit for installation of a hot water generator at your facility in Palm Bay, Florida.

Please submit any written comments you wish to have considered concerning the Department's proposed action to Mr. Bill Thomas of the Bureau of Air Quality Management.

Sincerely,

C. H. Fancy, P.E.
Deputy Chief
Bureau of Air Quality
Management

CHF/JR/t

Attachments

cc: C. Collins, Central District
F. Cross, Jr., P.E.

BEFORE THE STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

In the Matter of
Application for Permit by:

Macho Products, Inc.
2550 Kirby Avenue
Palm Bay, FL 32905

DER File No. 05-166482

INTENT TO ISSUE

The Department of Environmental Regulation hereby gives notice of its intent to issue a permit (copy attached) for the proposed project as detailed in the application specified above. The Department is issuing this Intent to Issue for the reasons stated in the attached Technical Evaluation and Preliminary Determination.

The applicant, Macho Products, Inc., applied on June 19, 1989, to the Department of Environmental Regulation for a permit to install a hot water generator at their facility in Palm Bay, Brevard County, Florida.

The Department has permitting jurisdiction under Chapter 403, Florida Statutes, and Florida Administrative Code Rules 17-2 and 17-4. The project is not exempt from permitting procedures. The Department has determined that an air construction permit is required for the proposed work.

Pursuant to Section 403.815, F.S. and DER Rule 17-103.150, F.A.C., you (the applicant) are required to publish at your own expense the enclosed Notice of Intent to Issue Permit. The notice shall be published one time only within 30 days, in the legal ad section of a newspaper of general circulation in the area affected. For the purpose of this rule, "publication in a newspaper of general circulation in the area affected" means publication in a newspaper meeting the requirements of Sections 50.011 and 50.031, F.S., in the county where the activity is to take place. The applicant shall provide proof of publication to the Department, at the address specified within seven days of publication. Failure to publish the notice and provide proof of publication within the allotted time may result in the denial of the permit.

The Department will issue the permit with the attached conditions unless a petition for an administrative proceeding (hearing) is filed pursuant to the provisions of Section 120.57, F.S.

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. Petitions filed by the permit applicant and the parties listed below must be filed within 14 days of receipt of this intent. Petitions filed by other persons must be filed within 14 days of publication of the public notice or within 14 days of receipt of this intent, whichever first occurs. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, Florida Statutes.

The Petition shall contain the following information;

(a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed;

(b) A statement of how and when each petitioner received notice of the Department's action or proposed action;

(c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action;

(d) A statement of the material facts disputed by Petitioner, if any;

(e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action;

(f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action; and


(g) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action or proposed action.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this notice. Persons whose substantial interests will be affected by any decision of the Department with regard to the application(s) have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of publication of this notice in the Office in General Counsel at the above address of the Department. Failure to petition within the allowed time frame constitutes a waiver of any right such

person has to request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-5.207, F.A.C.

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION



C. H. Fancy, P.E.
Deputy Chief
Bureau of Air Quality
Management

Copies furnished to:

C. Collins, Central District
F. Cross, Jr., P.E.

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this NOTICE OF INTENT TO ISSUE and all copies were mailed before the close of business on 8-11-89.

FILING AND ACKNOWLEDGEMENT
FILED, on this date, pursuant to
§120.52(9), Florida Statutes, with
the designated Department Clerk,
receipt of which is hereby
acknowledged.

Madha J. Wise 8-11-89
Clerk Date

State of Florida
Department of Environmental Regulation
Notice of Intent to Issue

The Department of Environmental Regulation hereby gives notice of its intent to issue a permit to Macho Products, Inc., 2550 Kirby Avenue, Palm Bay, Florida 32905, to install a hot water generator at their facility in Palm Bay, Brevard County, Florida. A determination of Best Available Control Technology (BACT) was not required. The Department is issuing this Intent to Issue for the reasons stated in the Technical Evaluation and Preliminary Determination.

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, within fourteen (14) days of publication of this notice. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, Florida Statutes.

The Petition shall contain the following information;

- (a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed;
- (b) A statement of how and when each petitioner received notice of the Department's action or proposed action;
- (c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action;
- (d) A statement of the material facts disputed by Petitioner, if any;
- (e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action;
- (f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action; and
- (g) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action or proposed action.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the

Department's final action may be different from the position taken by it in this Notice. Persons whose substantial interests will be affected by any decision of the Department with regard to the application have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of publication of this notice in the Office of General Counsel at the above address of the Department. Failure to petition within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-5.207, F.A.C.

The application is available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at:

Department of Environmental Regulation
Bureau of Air Quality Management
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Dept. of Environmental Regulation
Central District
3319 Maguire Blvd., Suite 232
Orlando, Florida 32803-3767

Any person may send written comments on the proposed action to Mr. Bill Thomas at the Department's Tallahassee address. All comments mailed within 14 days of the publication of this notice will be considered in the Department's final determination.

Technical Evaluation
and
Preliminary Determination

Macho Products, Inc.
Brevard County
Palm Bay, Florida

Hot Water Generator
Permit No. AC 05-166482

Florida Department of Environmental Regulation
Division of Air Resources Management
Bureau of Air Quality Management
Central Air Permitting

August 9, 1989

I. Application

A. Applicant

Macho Products, Inc.
2550 Kirby Avenue
Palm Bay, Florida 32905

B. Request

The Department received an application on June 19, 1989, for a permit to install a hot water generator at the applicant's facility in Palm Bay, Florida. The application was deemed complete on July 18, 1989.

C. Location/Classification

The applicant's martial arts equipment manufacturing facility (SIC Code 3949) is located on the west side of Palm Bay with latitude and longitude of 28°02'21"N and 80°35'33"W, respectively. The UTM coordinates of the site are: Zone 17, 539.8 km E and 3,101.4 km N.

II. Project Description/Emissions

It is proposed to install a packaged hot water generator to serve five solvent and paint mix tanks, one solvent cleaning tank and a heat tunnel for drying paint from the vinyl paint dipping operation. The hot water generator will fire up to four gallons per hour of No. 2 diesel fuel containing a maximum of 0.5 percent sulfur. Emissions will be insignificant as shown below:

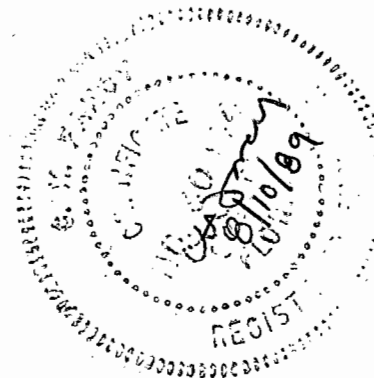
<u>Pollutant</u>	<u>Potential Emissions (Tons/Yr)</u>
Particulate Matter	0.008
SO ₂	0.295
CO	0.021
NO _x	0.083
VOC	0.001

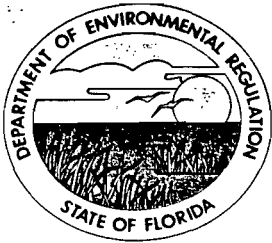
III. Rule Applicability

The construction permit application is subject to review under Chapter 403, Florida Statutes, and Florida Administrative Code (F.A.C.) Chapters 17-2 and 17-4. The facility is located in an area classified as attainment for all of the regulated air pollutants. Applicable rules are F.A.C. Rule 17-2.520, Sources not Subject to Prevention of Significant Deterioration or Nonattainment Requirements, and F.A.C. Rule 17-2.610, General Particulate Emission Limiting Standards.

IV. Conclusion

Based on the information provided by Macho Products, Inc., the Department has reasonable assurance that the proposed construction/installation of a hot water generator as described in this evaluation, and subject to the conditions proposed herein, will not cause or contribute to a violation of any air quality standard, PSD increment, or any other technical provision of Chapter 17-2 of the Florida Administrative Code.





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 05-166482
Expiration Date: December 1, 1989
County: Brevard
Latitude/Longitude: 28°02'21"N
80°35'33"W
Project: Hot Water Generator

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rule(s) 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 a hot water generator. 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.

PERMITTEE:
Macho Products, Inc.

Permit No. AC 05-166482
Expiration Date: Dec. 1, 1989

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.

PERMITTEE:
Macho Products, Inc.

Permit No. AC 05-166482
Expiration Date: Dec. 1, 1989

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.

PERMITTEE:
Macho Products, Inc.

Permit No. AC 05-166482
Expiration Date: Dec. 1, 1989

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.

PERMITTEE:
Macho Products, Inc.

Permit No. AC 05-166482
Expiration Date: Dec. 1, 1989

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. The hot water generator shall be fired with No. 2 fuel oil or diesel fuel at a maximum heat input rate of 0.56 MMBtu/hr and containing no more than 0.5 percent (wt.) sulfur.

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

6. 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

PERMITTEE:
Macho Products, Inc.

Permit No. AC 05-166482
Expiration Date: Dec. 1, 1989

SPECIFIC CONDITIONS:

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 _____ day
of _____, 1989

**STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION**

Dale Twachtmann, Secretary



MACHO PRODUCTS, INC.

21-Jul-89

Mr. C. H. Fancy, P.E.
Deputy Chief, Bureau of Air Quality Management
Florida Dept. of Environmental Regulation
Twin Towers Office
2600 Blair Stone Road
Tallahassee, Fl 32399 - 2400

RECEIVED

JUL 25 1989

DER-BAQM

Dear Sir

We received your letter of July 12. It says that justification is needed for the absence of emission reduction equipment and that incineration, carbon adsorption, or condensation appear feasible. It says our application should state why such control would not be feasible.

Our understanding was that our application was already in accord with DER regulations:

prepared and sealed by licensed engineers
tested with the Industrial Source Complex model
(in default or worst-case mode)
system conforming to good engineering practices on stack
height
consumption less than 240 tons of solvent per year
resultant ground level concentration below 1/100 of the TLV

We note that Brevard County is an "attainment" area in terms of air quality. Our understanding is that best available control technology is not required.

Nevertheless, in response to your letter we have had Cross/Tessitore prepare a report on the technical feasibility and costs of emission reduction. A copy is enclosed. The report considers:

absorption
adsorption
condensation
direct incineration
catalytic incineration.

I'll summarize the conclusions. Fire safety considerations require diluting the concentration and increasing the emission flow to 5000 cfm. Condensation is considered inappropriate for the resultant emission concentration. Absorption is inappropriate for a mixture of organic vapors.

Costs are estimated for the remaining three techniques and listed in the report. Of the three, catalytic incineration appears the most favorable/least unfavorable. Its cost would be \$156,000 in initial capital cost and \$89,000 in annual operating cost.



MACHO PRODUCTS, INC.

The question of feasibility must relate to the economics of the firm. Such expenditures would place a severe, perhaps destructive burden on Macho Products. We consider that the cost of emission reduction is not feasible for us at this time.

The number of vinyl dipping operations in the United States is small. Within the last 12 months, 3 of them, including the largest, have moved to northern Mexico. It is my understanding that a major reason for the move was their concern over the cost of environmental regulation. These are operations with which we directly compete.

I note that Macho Products employs 50 people, makes significant contributions to all levels of government taxation and to the economy of the region, produces a line of martial arts safety equipment which is regarded as the industry leader, and sells this equipment in all parts of the United States and overseas as well.

We consider environmental concerns to be very important. We expect the emission control system under consideration to cost on the order of \$40,000. This is a major impact on a firm our size. We recognize that we may well have to consider emission reduction at some point in the future. Another line of exploration we will pursue is the possibility of water-based dipping, although so far it has proved infeasible.

Thank you for your consideration in these matters.

I would also like to request your help in finding where I might obtain the following U.S. E.P.A. publications:

Control Technologies for Hazardous Air Pollutants
E. A. D. Control Cost Manual

Sincerely

Richard Hathaway
Systems Manager

Copies: Dud Gordon
Frank Cross

Enclosure

File: DER4 disk 1.7

*copied: J. Reynolds
C. Collins, et al.
CHF/BT*

**Comparison Of Alternative
Techniques For VOC Control**

prepared for
Macho Products
Melbourne, Florida

July 20, 1989

(Abridged Concept Engineering
Report To Provide Macho
With Information To Respond To a FDER Letter)

Prepared by:

Cross/Tessitore & Associates, P.A.
4763 S. Conway Road, Suite F
Orlando, Florida 32812
(407) 851-1484
R0147

1.0 INTRODUCTION

In response to the State's request for additional information concerning Macho Products' permit application for vinyl dipping operations (AC05-166484), C/TA has prepared the following review of VOC emission control techniques. The techniques considered include absorption, adsorption, condensation, direct flame incineration, and catalytic incineration.

Absorption and condensation did not appear suitable for this application for reasons stated below. Accordingly, no cost figures are presented for these two technologies.

Preliminary review indicates adsorption, direct flame incineration, and catalytic incineration may be suitable for this application. As requested by the state, cost information has been prepared and is presented as part of this review.

The following briefly discusses selection criteria for the different control techniques and presents capital and operating cost for applicable technologies.

2.0 PROJECT APPROACH

The VOC emissions from the paint dipping and glue drying operations that vent through the dryer stack are estimated to be 157.1 lb/hr. This information along with the estimated gas flow rate of 1595 acfm was used to calculate a toluene concentration of 6950 ppm. Toluene was chosen as the basis for all VOC emissions due to its high usage rate and its susceptible lower explosive limit of 12000 ppm.

Safety considerations call for the VOC concentration in any exhaust stream to be no greater than 25% of the lower explosive limit. The dryer stack plume would have to be diluted with air in order to lower the toluene concentration to the required 3000 ppm or less. This would require increasing the gas flow rate from the present 1595 acfm to 3685 acfm. In order to allow an additional safety margin, a gas flow rate of 5000 acfm with a toluene concentration of 3000 ppm was used as the basis for evaluation of the control techniques.

3.0 VOC CONTROL TECHNOLOGIES

Condensation was deemed unsuitable after reviewing Figure 3-1 and Table 3-1 of the U.S. EPA's "Control Technologies For Hazardous Air Pollutants" handbook. This information has been reproduced and included in this report under the heading Exhibit 1. Figure 3-1 shows that condensation does not offer the percent reduction that the other technologies do at 3000 ppm. Furthermore, Table 3-1 indicates the

Table 3-1. Key Emission Stream and HAP Characteristics for Selecting Control Techniques for Organic Vapors from Point Sources

Control Device	Emission Stream Characteristics				HAP Characteristics ^a				
	HAP/Organics Contents ^b (ppmv)	Heat Content (Btu/scf)	Moisture Content (%)	Flow Rate (scfm)	Temp. (°F)	Molecular Weight (lb/lb-mole)	Solubility	Vapor Pressure (mm Hg)	Adsorptive Properties
Thermal Incinerator	>20; (<25% of LEL ^c)			<100,000 ^d					
Catalytic Incinerator	50-10,000; (<25% of LEL ^c)			<100,000					
Flare		>300 ^e		<2,000,000 ^f					
Boiler/ Process Heater ^g		>150 ^h		Steady					
Carbon Adsorber	1,000-10,000 (<25% of LEL ^c)		50% ⁱ	300-100,000	100-200	45-130			Must be able to adsorb on/desorb from available adsorbents
Absorber	250-10,000			1,000-100,000					Must be readily soluble in water or other solvents
Condenser	>5,000			<2,000				>10 (at room temperature)	

^aRefers to the characteristics of the individual HAP if a single HAP is present and to that of the HAP mixture if a mixture of HAP's is present.

^bDetermined from HAP/hydrocarbon content.

^cFor emission streams that are mixtures of air and VOC; in some cases, the LEL can be increased to 40 to 50% with proper monitoring and control (see Section 4.2 for definition of LEL).

^dFor packaged units; multiple-package or custom-made units can handle larger flows.

^eBased on EPA's guidelines for 98% destruction efficiency.

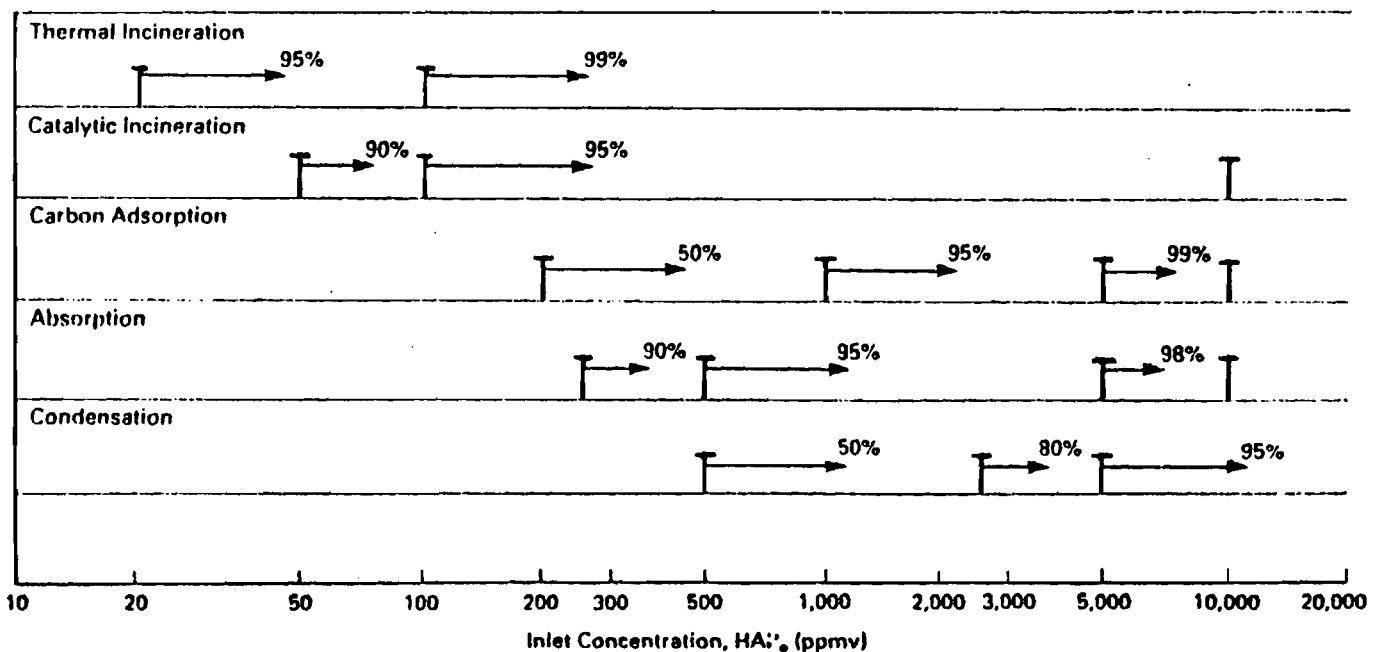
^fUnits: lb/hr. Source: Reference 14.

^gApplicable if such a unit is already available on site.

^hTotal heat content.

ⁱRelative humidity.

Figure 3-1. Percent reduction ranges for add-on control devices.



exhaust stream should have an organics content of greater than 5000 ppm and a gas flow rate of less than 2000 scfm. Assuming the previously described flow rate of 5000 acfm with a concentration of 3000 ppm, condensation would not be suitable.

Absorption, when used as an emission control, is most commonly employed for inorganic vapors. A suitable solvent for each pollutant in the exhaust stream must be available and the spent solvent should be easily regenerated or disposed of in a responsible manner. Solvent selection for a multiple pollutant exhaust stream is an onerous task. Accordingly, absorption was dropped from consideration in favor of more proven technologies.

Adsorption and incineration, both direct flame and catalytic, are widely used as VOC emission control methods. All three technologies afford very high rates of VOC control if properly operated and maintained. These three technologies may be suitable for this application, but all require sizable capital investments and annual operating costs.

Capital and operating cost for all three techniques have been prepared using the U.S. EPA's "EAB Control Cost Manual" (3rd edition), and are presented in Table 1. Capital costs are intended to be as comprehensive as possible. Components of the capital costs figures are detailed in Table 2. Site preparation and buildings tend to be site specific and no attempt to calculate these costs has been made. The annual operating cost are also intended to be as comprehensive as possible, so all expected cost have been included. The components of the annual operating costs are shown in Table 3. Included in the annual operating costs is capital recovery. This allows for the different systems to be directly compared.

Direct flame incineration tends to be fuel intensive, so annual operating costs are sensitive to fuel prices. Catalytic incineration requires approximately 60% less fuel than direct flame but the catalyst can be sensitive to pollutant characteristics and process conditions.

Incineration destroys the VOC pollutants by combustion, whereas adsorption captures the VOC's on a carbon bed. The bed is periodically regenerated often times using low pressure steam, hot inert gases, or a combination of vacuum and hot gas. If steam is used it can be condensed following the regeneration process. The desorbed VOC's must then be recovered from the effluent and in some cases the recovered VOC's may be reused. Recovering the VOC's is done by simple decantation in the case of water insoluble materials. Water soluble materials would require distillation, a more complicated process.

TABLE 1

VOC EMISSION CONTROL COST

Method	Capital Costs (\$)	Annual Operating Costs (\$/yr)
Adsorption	212,000	80,000
Direct Flame Incineration		
No Heat Recovery	126,000	149,000
35% Heat Recovery	224,000	128,000
Catalytic Incineration		
No Heat Recovery	156,000	89,000
35% Heat Recovery	234,000	88,000

TABLE 2

CAPITAL COSTS COMPONENTS

1) Direct Costs

- A) Purchased Equipment Cost
 - Incinerator (or Carbon Adsorber)
 - Auxiliary Equipment
 - Instruments and Controls
 - Taxes
 - Freight

- B) Direct Installation Costs
 - Foundations and Supports
 - Erection and Handling
 - Electrical
 - Piping
 - Insulation
 - Painting

2) Indirect Costs

- Engineering and Supervision
- Construction and Field Expenses
- Construction Fee
- Start Up
- Performance Test
- Contingency

TABLE 3

ANNUAL OPERATING COSTS COMPONENTS

1) Direct Operating Costs

Operating Labor
Supervisory Labor
Maintenance Labor
Maintenance Materials
Replacement Parts
Fuel
Electricity

2) Indirect Operating Costs

Overhead
Administrative Charges
Property Tax
Insurance
Capital Recovery

SENDER: Complete items 1 and 2 when additional services are desired, and complete items 3 and 4.
 Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested.

1. Show to whom delivered, date, and addressee's address. (Extra charge) 2. Restricted Delivery (Extra charge)

3. Article Addressed to:
 Mr. Dudley Gordon, President
 Macho Products, Inc.
 2550 Kirby Avenue
 Palm Bay, Florida 32905

4. Article Number
 P 938 762 619

Type of Service:
 Registered Insured
 Certified COD
 Express Mail Return Receipt for Merchandise

Always obtain signature of addressee or agent and DATE DELIVERED.

5. Signature - Address
 X *Machon P. Gordon*

6. Signature - Agent
 X

7. Date of Delivery

8. Addressee's Address (ONLY if requested and fee paid)

PS Form 3811, Mar. 1988 * U.S.G.P.O. 1988-212-865 DOMESTIC RETURN RECEIPT

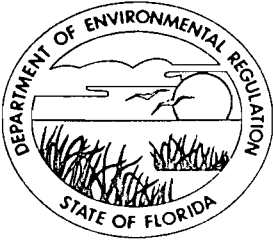
P 938 762 619

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED
 NOT FOR INTERNATIONAL MAIL
 (See Reverse)

PS Form 3800, June 1985

Sent to	
Mr. Dudley Gordon, Macho Products	
Street and No.	
2550 Kirby Avenue	
P.O., State and ZIP Code	
Palm Bay, Florida 32905	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt showing to whom and Date Delivered	
Return Receipt showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	\$
Postmark or Date	
Mailed: 7-12-89	
Permit: AC 05-166484	



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

July 12, 1989

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

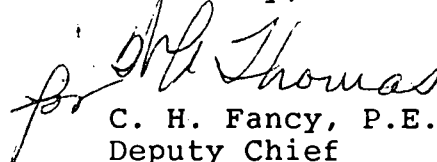
Mr. Dudley Gordon, President
Macho Products, Inc.
2550 Kirby Avenue
Palm Bay, Florida 32905

Dear Mr. Gordon:

Re: Permit Application for Vinyl Dipping Operation
(AC 05-166484)

This is to provide notice that additional information is required for preliminary review of the above application for your vinyl dipping operation. Specifically, justification is needed for the absence of air pollution control equipment. The vinyl dipping operation generates significant VOC emissions which are ducted through a common system yielding a low volume and relatively concentrated stream of air contaminants. Due to the presence of this common ducting system, it appears that pollution abatement of the "dryer stack" exhaust, by incineration, carbon adsorption or condensation, would be feasible. To avoid pollution control in this instance, the application should state why such control, in conjunction with your low volume, common ducting system, would not be feasible.

Sincerely,



C. H. Fancy, P.E.
Deputy Chief
Bureau of Air Quality
Management

CHF/JR/t

cc: F.L. Cross, P.E.
C. Collins, Central District



CROSS/TESSITORE & ASSOCIATES, P.A.

4763 S. CONWAY ROAD, SUITE F
ORLANDO, FLORIDA 32812
407/851-1484

RECEIVED
DER - MAIL ROOM

1989 JUN 19 PM 1: 35

June 16, 1989

RECEIVED

JUN 19 1989

DER - BAQM

Mr. Bill Thomas P.E.
Florida Department of Environmental Regulation
Twin Towers Office Bldg.
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Subject: Macho Products, Inc.
C/TA #M16.490

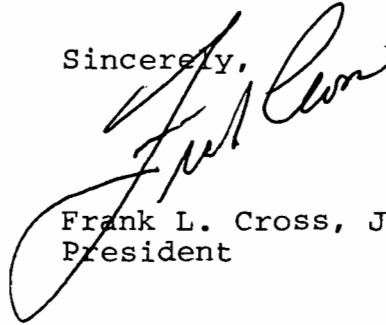
Dear Mr. Thomas:

Please find enclosed subject source items:

- 1) Four (4) copies of the Application To Construct Air Pollution Source for the main plant process ventilation exhaust system.
- 2) A check in the amount of \$2500.00 made payable to the FDER for the application processing fee for the main exhaust system.
- 3) Four (4) copies of the Air Dispersion Modeling Results in support of the main exhaust system.
- 4) Four (4) copies of the proposed layout drawings on the main exhaust system.
- 5) Four (4) copies of the Application To Construct Air Pollution Source for the No. 2 diesel oil fired hot water generator.
- 6) A check in the amount of \$200.00 made payable to the FDER for the application processing fee for the hot water generator.

Should you have any questions, please do not hesitate to call.

Sincerely,



Frank L. Cross, Jr., P.E.
President

FLC:dk

Enc.: a/s

cc: Richard Hathaway - Macho Products, Inc.

Charles M. Collins - FDER-Central Fl. District

*copied C. Collins
J. Reynolds*

MACHO PRODUCTS, INC. 122088

OPERATING ACCOUNT

PHONE 407-729-6137

2550 KIRBY AVENUE, N.E.

PALM BAY, FL 32905-3494

C450

1012

63-215 838
631

June 13 1989

PAY TO THE ORDER OF FDER

\$ 200⁰⁰/₁₀₀

Two hundred and ⁰⁰/₁₀₀

DOLLARS



Sun Bank, N.A.
Palm Bay Office 838
Palm Bay, FL 32905

Audrey J. Gordon
Debra Allen

FOR application fee - boiler

Twin Towers Office Bldg.
2600 Blair Stone Road

MACHO PRODUCTS, INC. 122088

OPERATING ACCOUNT

PHONE 407-729-6137

2550 KIRBY AVENUE, N.E.

PALM BAY, FL 32905-3494

0450

1014

63-215 838
631

June 13 1989

PAY TO THE ORDER OF FDER

\$ 2500⁰⁰/₁₀₀

Two thousand five hundred and ⁰⁰/₁₀₀

DOLLARS



Sun Bank, N.A.
Palm Bay Office 838
Palm Bay, FL 32905

Audrey J. Gordon
Debra Allen

FOR application fee - main exhaust

in support of the main exhaust system.

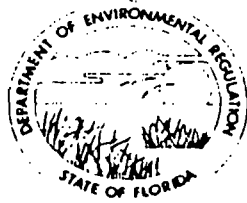
- 4) Four (4) copies of the proposed layout drawings on the main exhaust system.
- 5) Four (4) copies of the Application To Construct Air Pollution Source for the No. 2 diesel oil fired hot water generator.
- 6) A check in the amount of \$200.00 made payable to the FDER for the application processing fee for the hot water generator.

1031

DEPARTMENT OF ENVIRONMENTAL REGULATION

200 pd.
6-19-89
Recpt. # 117630

RECEIVED



AC 05-166442

JUN 19 1989

DER-BAQM

APPLICATION TO OPERATE/CONSTRUCT AIR POLLUTION SOURCES

SOURCE TYPE: Hot Water Generator [] New¹ [x] Existing¹

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

COMPANY NAME: Macho Products, Inc. COUNTY: Brevard

Identify the specific emission point source(s) addressed in this application (i.e. Lime No. 2 Diesel Oil Fired Kiln No. 4 with Venturi Scrubber; Peaking Unit No. 2, Gas Fired) Hot Water Generator

SOURCE LOCATION: Street 2550 Kirby Avenue 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: Same 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 Construction 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: Dudley J. Gordon
Dudley Gordon, President
Name and Title (Please Type)

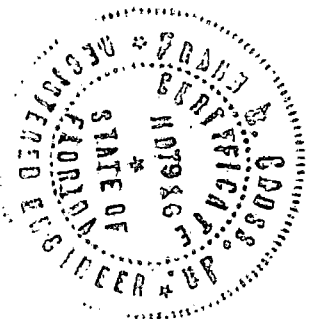
Date: 6/13/89 Telephone No. (907)729-6137

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 discharge 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 Frank L. Cross, Jr.
 Frank L. Cross, Jr., P.E., President
 Name (Please Type)

Cross/Tessitore and Associates; P.A.
 Company Name (Please Type)
4763 South Conway Road; Suite F
Orlando, Florida 32812
 Mailing Address (Please Type)

Florida Registration No. 7916 Date: 6-15-89 Telephone No. (407)851-1484

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 operation consists of a packaged Columbia hot water heater generator, Model No. FT-180 utilizing 4 gal/hr of No. 2 diesel oil as a fuel source. This generator is used to provide heat to: five solvent & paint mix tanks, one solvent cleaning tank and a heat tunnel (utilized to expedite paint drying from the vinyl paint dipping operation). This project will result in compliance with FDER regulations.

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

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 equipment is utilized.

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

None

E. Requested permitted equipment operating time: hrs/day *; days/wk *; wks/yr 52;
if power plant, hrs/yr ; if seasonal, describe: *40 hr/wk or less as demand
deems necessary.

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? | <u>YES</u> |
| a. If yes, has "offset" been applied? | <u>---</u> |
| b. If yes, has "Lowest Achievable Emission Rate" been applied? | <u>---</u> |
| c. If yes, list non-attainment pollutants. | <u>OZONE</u> |
| 2. Does best available control technology (BACT) apply to this source?
If yes, see Section VI. | <u>NO</u> |
| 3. Does the State "Prevention of Significant Deterioration" (PSD)
requirement apply to this source? If yes, see Sections VI and VII. | <u>NO</u> |
| 4. Do "Standards of Performance for New Stationary Sources" (NSPS)
apply to this source? | <u>NO</u> |
| 5. Do "National Emission Standards for Hazardous Air Pollutants"
(NESHAP) apply to this source? | <u>NO</u> |
| H. Do "Reasonably Available Control Technology" (RACT) requirements apply
to this source? | <u>NO</u> |
| a. If yes, for what pollutants? | <u>---</u> |
| 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: N/A

Description	Contaminants		Utilization Rate - lbs/hr	Relate to Flow Diagram
	Type	% Wt		

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

1. Total Process Input Rate (lbs/hr): N/A

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 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/hr	T/yr	
Opacity			17-2.610(2)	20% Opacity			
Particulate	0.008	0.008	17-2.610(2)(B)	---	0.008	0.008	
SO ₂	0.284	0.295	N/A	---	0.284	0.295	
CO	0.020	0.021	N/A	---	0.020	0.021	
NO _x	0.080	0.083	N/A	---	0.080	0.083	
VOC	0.001	0.001	N/A	---	0.001	0.001	

¹See Section V, Item 2.

²Reference 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)

³Calculated from operating rate and applicable standard.

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

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

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

E. Fuels

Type (Be Specific)	Consumption*		Maximum Heat Input (MMBTU/hr)
	avg/hr	max./hr	
No. 2 Diesel	4.0 gal	4.0 gal.	0.564000

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

Fuel Analysis:

Percent Sulfur: 0.5 Percent Ash: 0.68

Density: 7.206 lbs/gal Typical Percent Nitrogen: .0072

Heat Capacity: 19,036 BTU/lb 141,000 BTU/gal

Other Fuel Contaminants (which may cause air pollution): N/A

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: 18 1/2 ft. Stack Diameter: 0.83 ft.
 Gas Flow Rate: 225 ACFM 118 DSCFM Gas Exit Temperature: 550° °F.
 Water Vapor Content: 0 % Velocity: 7.5 FPS
 See Section III - H Attachment

SECTION IV: INCINERATOR INFORMATION N/A

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 Diameter: _____ 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 roadway (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 be 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 N/A

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

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. 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:

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:

¹Explain method of determining efficiency.

²Energy 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:

¹Explain method of determining efficiency.

²Energy 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:

¹Applicant 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 N/A

A. Company Monitored Data

1. _____ no. sites _____ TSP _____ () SO₂* _____ 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.

MACHO PRODUCTS COMPANY

Section III H Attachment

EMISSION STACK GEOMETRY AND FLOW CHARACTERISTICS

Assumptions

Stack diameter = 10"; $\frac{10''}{12''} = 0.83$ ft

Gas flow rate = 225 ACFM (As per manufacturer's engineering department)

CALCULATIONS

$$\frac{(0.83)^2 (3.14)}{4} = 0.5 \text{ ft}^2$$

$$\frac{225 \text{ ft}^3/\text{min}}{0.5 \text{ ft}^2} = 450 \text{ ft}/\text{min} \times \frac{1 \text{ min}}{60 \text{ sec}} = 7.5 \text{ ft}/\text{sec}$$

CONVERSION OF ACFM TO SCFM

Assumptions

0% H₂O @ 1 ATM pressure; 70°F temp.

Gas flow rate = 225 ACFM

Flue gas temperature = 550° F (As per manufacturer's engineering dept).

Calculations

$$\frac{(460 + 70)}{(460 + 550)} \times 225 = 118.1 \text{ SCFM}$$

SECTION V
SUPPLEMENTAL REQUIREMENTS

SECTION V
ITEMS 1 & 2

FUEL COMBUSTION CALCULATION INPUT PARAMETERS

DATE: 03-May-89

HOURS OF OPERATION

Macho Products

hrs/day	=	8	hrs/yr	=	2,080
days/wk	=	5			
wks/yr	=	52			

FUEL CONSUMPTION

Natural Gas Consumption	=	0 Million cu. ft./yr
Distillate Oil (No. 2) Consumption	=	0.00832 Million gal/yr

EMISSION FACTORS

Emission factors for Distillate Oil and Natural Gas are from AP-42, Tables 1.3-1 and 1.4-1, respectfully.

Particulates (Uncontrolled)

lbs/1,000,000 cu. ft. of Natural Gas	=	5 lbs/1,000,000 cu. ft.
lbs/1,000 gal of Distillate Oil	=	2 lbs/1,000 gal

Sulfur Dioxide

lbs/1,000,000 cu. ft. of Natural Gas	=	0.6 lbs/1,000,000 cu. ft.
Distillate Oil % Sulfur by Weight	=	0.5 %
lbs/1,000 gal of Distillate Oil	=	142 lbs/1,000 gal of fuel

Nitrogen Oxide

lbs/1,000,000 cu. ft. of Natural Gas	=	140 lbs/1,000,000 cu. ft.
lbs/1,000 gal of Distillate Oil	=	20 lbs/1,000 gal

Carbon Monoxide

lbs/1,000,000 cu. ft. of Natural Gas	=	35 lbs/1,000,000 cu. ft.
lbs/1,000 gal of Distillate Oil	=	5 lbs/1,000 gal

Hydrocarbon

lbs/1,000,000 cu. ft. of Natural Gas	=	3 lbs/1,000,000 cu. ft.
lbs/1,000 gal of Distillate Oil	=	0.2 lbs/1,000 gal

ADDITIONAL DATA

Efficiency of Air Pollution Control	=	0 %
-------------------------------------	---	-----

1 ITEM 2 1

CALCULATION OF EMISSIONS

PARTICULATES

Natural Gas Consumption

$$0.00000 \text{ million cu. ft./yr} \quad \times \quad 5.0 \text{ lb/million cu. ft.}$$

$$2,000 \text{ lbs/ton}$$

$$= 0.00000 \text{ tons/yr}$$

Distillate Fuel Oil Consumption (No. 2)

$$0.00832 \text{ million gal/yr} \quad \times \quad 2.0 \text{ lb/1,000 gal}$$

$$2,000 \text{ lbs/ton}$$

$$= 0.00832 \text{ tons/yr}$$

Total Uncontrolled Particulates =

$$(0.00000 \quad + \quad 0.00832) \text{ tons/yr}$$

$$= 0.00832 \text{ tons/yr}$$

$$0.00832 \text{ tons/yr} \times 2,000 \text{ lbs/ton}$$

$$= 0.00800 \text{ lbs/hr}$$

$$2,080 \text{ hrs/yr}$$

Air Pollution Control Efficiency = 0 %

Total Controlled Particulates =

$$0.00832 \text{ tons/yr} \times (1 - 0.00000) = 0.00832 \text{ tons/yr}$$

$$0.00832 \text{ tons/yr} \times 2,000 \text{ lbs/ton}$$

$$= 0.00800 \text{ lbs/hr}$$

$$2,080 \text{ hrs/yr}$$

SULFUR DIOXIDE (SO2)

Natural Gas Consumption

$$0.00000 \text{ million cu. ft./yr} \quad \times \quad 0.6 \text{ lb/million cu. ft.}$$

$$2,000 \text{ lbs/ton}$$

$$= 0.00000 \text{ tons/yr}$$

Distillate Fuel Oil Consumption (No. 2)

Emission Factor = 142 lbs/1,000 gal x S, where

$$S = \text{Fuel Oil \% Sulfur by Weight} = 0.5 \%$$

$$= 142 \text{ lbs/1,000 gal} \times 0.5$$

$$= 71 \text{ lbs/1,000 gal}$$

$$0.00832 \text{ million gal/yr} \quad \times \quad 71.0 \text{ lb/1,000 gal}$$

$$2,000 \text{ lbs/ton}$$

$$= 0.29536 \text{ tons/yr}$$

Total Sulfur Dioxide =

$$(0.00000 + 0.29536) \text{ tons/yr}$$

$$= 0.29536 \text{ tons/yr}$$

$$0.29536 \text{ tons/yr} \times 2,000 \text{ lbs/ton}$$

$$= 0.28400 \text{ lbs/hr}$$

$$2,080 \text{ hrs/yr}$$

NITROGEN OXIDE (NOX)

Natural Gas Consumption

$$0.00000 \text{ million cu. ft./yr} \quad \times \quad 140.0 \text{ lb/million cu. ft.}$$

$$2,000 \text{ lbs/ton}$$

$$= 0.00000 \text{ tons/yr}$$

Distillate Fuel Oil Consumption (No. 2)

$$0.00832 \text{ million gal/yr} \quad \times \quad 20.0 \text{ lb/1,000 gal}$$

$$2,000 \text{ lbs/ton}$$

$$= 0.08320 \text{ tons/yr}$$

Total Nitrogen Oxide =

$$(0.00000 \quad + \quad 0.08320) \text{ tons/yr}$$

$$= 0.08320 \text{ tons/yr}$$

$$0.08320 \text{ tons/yr} \times 2,000 \text{ lbs/ton}$$

$$2,080 \text{ hrs/yr}$$

$$= 0.08000 \text{ lbs/hr}$$

CARBON MONOXIDE (CO)

Natural Gas Consumption

$$0.00000 \text{ million cu. ft./yr} \quad \times \quad 35.0 \text{ lb/million cu.ft.}$$

$$2,000 \text{ lbs/ton}$$

$$= 0.00000 \text{ tons/yr}$$

Distillate Fuel Oil Consumption (No. 2)

$$0.00832 \text{ million gal/yr} \quad \times \quad 5.0 \text{ lb/1,000 gal}$$

$$2,000 \text{ lbs/ton}$$

$$= 0.02080 \text{ tons/yr}$$

Total Carbon Monoxide =

$$(0.00000 \quad + \quad 0.02080) \text{ tons/yr}$$

$$= 0.02080 \text{ tons/yr}$$

$$\frac{0.02080 \text{ tons/yr} \times 2,000 \text{ lbs/ton}}{2,080 \text{ hrs/yr}} = 0.02000 \text{ lbs/hr}$$

HYDROCARBONS (HC)

Natural Gas Consumption

$$\begin{array}{r} 0.00000 \text{ million cu. ft./yr} \quad \times \quad 3.0 \text{ lb/million cu.ft.} \\ \hline 2,000 \text{ lbs/ton} \\ = 0.00000 \text{ tons/yr} \end{array}$$

Distillate Fuel Oil Consumption (No. 2)

$$\begin{array}{r} 0.00032 \text{ million gal/yr} \quad \times \quad 0.2 \text{ lb/1,000 gal} \\ \hline 2,000 \text{ lbs/ton} \\ = 0.00083 \text{ tons/yr} \end{array}$$

Total Hydrocarbons =

$$\begin{array}{r} (0.00000 \quad + \quad 0.00083) \text{ tons/yr} \\ = 0.00083 \text{ tons/yr} \end{array}$$

$$\begin{array}{r} 0.00083 \text{ tons/yr} \times 2,000 \text{ lbs/ton} \\ \hline 2,080 \text{ hrs/yr} \end{array} = 0.00080 \text{ lbs/hr}$$

I ITEM 3 I

FUEL COMBUSTION EMISSION CALCULATIONS SUMMARY

POLLUTANT	ACTUAL EMISSION RATE		POTENTIAL EMISSION RATE	
	(LB/HR)	(TON/YR)	(LB/HR)	(TON/YR)
PARTICULATES	0.00800	0.00832	0.00800	0.00832
SULFUR DIOXIDE	0.28400	0.29536	0.28400	0.29536
NITROGEN OXIDE	0.08000	0.08320	0.08000	0.08320
CARBON MONOXIDE	0.02000	0.02080	0.02000	0.02080
HYDROCARBONS	0.00080	0.00083	0.00080	0.00083

ITEMS 3, 4, & 5

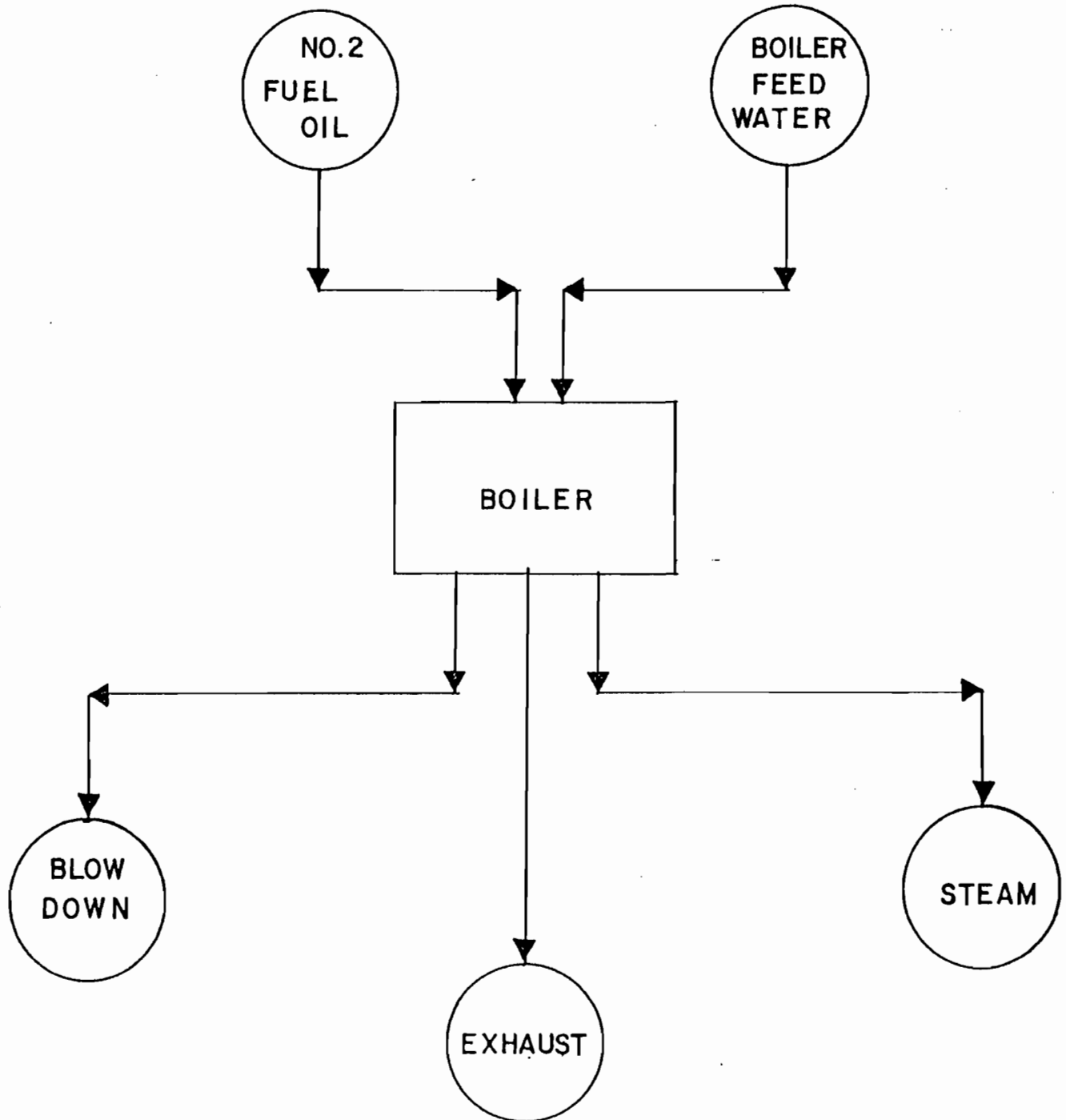
Potential Emissions & Pollution Control Efficiency

Potential emissions will be equal to the actual emissions because no control device is being used, therefore, there is no control efficiency.

MACHO PRODUCTS INC.

FIGURE 1

SCHEMATIC FLOW DIAGRAM
OF TYPICAL BOILER



Best Available Copy

TABLE 1.3-1. UNCONTROLLED EMISSION FACTORS FOR FUEL OIL COMBUSTION
EMISSION FACTOR RATING: A

Boiler Type ^a	Particulate ^b Matter		Sulfur Dioxide ^c		Sulfur Trioxide		Carbon Monoxide ^d		Nitrogen Oxide ^e		Volatile Organics ^f			
	kg/10 ³ gal	lb/10 ³ gal	kg/10 ³ gal	lb/10 ³ gal	kg/10 ³ gal	lb/10 ³ gal	kg/10 ³ gal	lb/10 ³ gal	kg/10 ³ gal	lb/10 ³ gal	kg/10 ³ gal	lb/10 ³ gal	kg/10 ³ gal	lb/10 ³ gal
Utility boilers Residual Oil	2	8	195	1575	0.245 ^h	2.95 ^h	0.6	5	8.0 (12.6)(5) ⁱ	67 (105)(42) ⁱ	0.09	0.76	0.03	0.28
Industrial boilers Residual Oil	2	8	195	1575	0.245	25	0.6	5	6.6 ^j	55 ^j	0.034	0.28	0.12	1.0
Distillate Oil	0.24	2	175	1425	0.245	25	0.6	5	2.4	20	0.024	0.2	0.006	0.052
Commercial boilers Residual Oil	2	8	195	1575	0.245	25	0.6	5	6.6	55	0.14	1.13	0.057	0.475
Distillate Oil	0.24	2	175	1425	0.245	25	0.6	5	2.4	20	0.04	0.34	0.026	0.216
Residential furnaces Distillate Oil	0.3	2.5	175	1425	0.245	25	0.6	5	2.2	18	0.085	0.713	0.314	1.78

^a Boilers can be approximately classified according to their gross (higher) heat rate as shown below:

- Utility (power plant) boilers: $>10^6 \times 10^3$ J/hr ($>100 \times 10^6$ Btu/hr)
- Industrial boilers: 10.6×10^3 to $10^6 \times 10^3$ J/hr (10×10^6 to 100×10^6 Btu/hr)
- Commercial boilers: 0.5×10^3 to 10.6×10^3 J/hr (0.5×10^6 to 10×10^6 Btu/hr)
- Residential furnaces: $<0.5 \times 10^3$ J/hr ($<0.5 \times 10^6$ Btu/hr)

^b References 2-7 and 24-25. Particulate matter is defined in this section as that material collected by EPA Method 5 (front half catch).

^c References 1-5. S indicates that the weight % of sulfur in the oil should be multiplied by the value given.

^d References 3-5 and 8-10. Carbon monoxide emissions may increase by factors of 10 to 100 if the unit is improperly operated or not well maintained.

^e Expressed as NO₂. References 1-5, 8-11, 17 and 26. Test results indicate that at least 95% by weight of NO₂ is NO for all boiler types except residential furnaces, where about 75% is NO.

^f References 18-21. Volatile organic compound emissions are generally negligible unless boiler is improperly operated or not well maintained, in which case emissions may increase by several orders of magnitude.

^g Particulate emissions (occur for residual oil combustion are, on average, a function of fuel oil grade and sulfur content:

Grade 6 oil: $1.25(S) + 0.38$ kg/10³ liter [$10(S) + 3$ lb/10³ gal] where S is the weight % of sulfur in the oil. This relationship is

based on 81 individual tests and has a correlation coefficient of 0.65.

Grade 5 oil: 1.25 kg/10³ liter (10 lb/10³ gal)

Grade 4 oil: 0.88 kg/10³ liter (7 lb/10³ gal)

^h Reference 25.

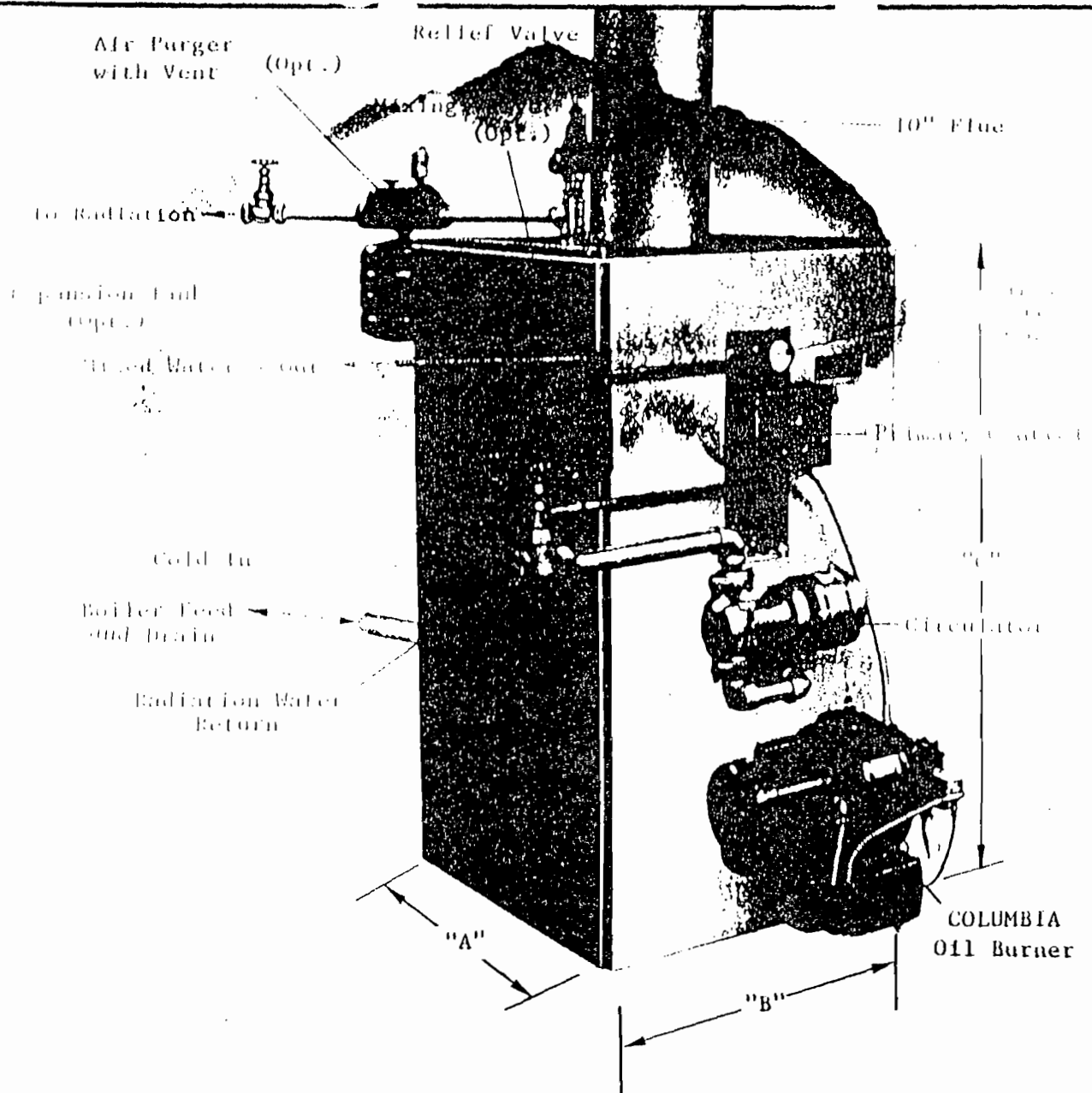
ⁱ Use 5 kg/10³ liter (42 lb/10³ gal) for tangentially fired boilers, 12.6 kg/10³ liter (105 lb/10³ gal) for vertical fired boilers, and 8.0 kg/10³ liter (67 lb/10³ gal) for all others, at full load and normal ($>15\%$) excess air. Several combustion modifications can be employed for NO_x reduction: (1)

limited excess air can reduce NO_x emissions 5-20%, (2) staged combustion 20-40%, (3) using low NO_x burners 20-50%, and (4) ammonia injection can reduce NO_x emissions 40-70% but may increase emissions of ammonia. Combinations of these modifications have been employed for further reductions in certain boilers.

See Reference 23 for a discussion of these and other NO_x reducing techniques and their operational and environmental impacts.

^j Nitrogen oxides emissions from residual oil combustion in industrial and commercial boilers are strongly related to fuel nitrogen content, estimated more accurately by the empirical relationship:

kg NO_x/10³ liter = $2.75 + 50(N)^2$ [lb NO_x/10³ gal = $22 + 410(N)^2$] where N is the weight % of nitrogen in the oil. For residual oils having high (>0.5 weight %) nitrogen content, use 15 kg NO_x/10³ liter (120 lb NO_x/10³ gal) as an emission factor.

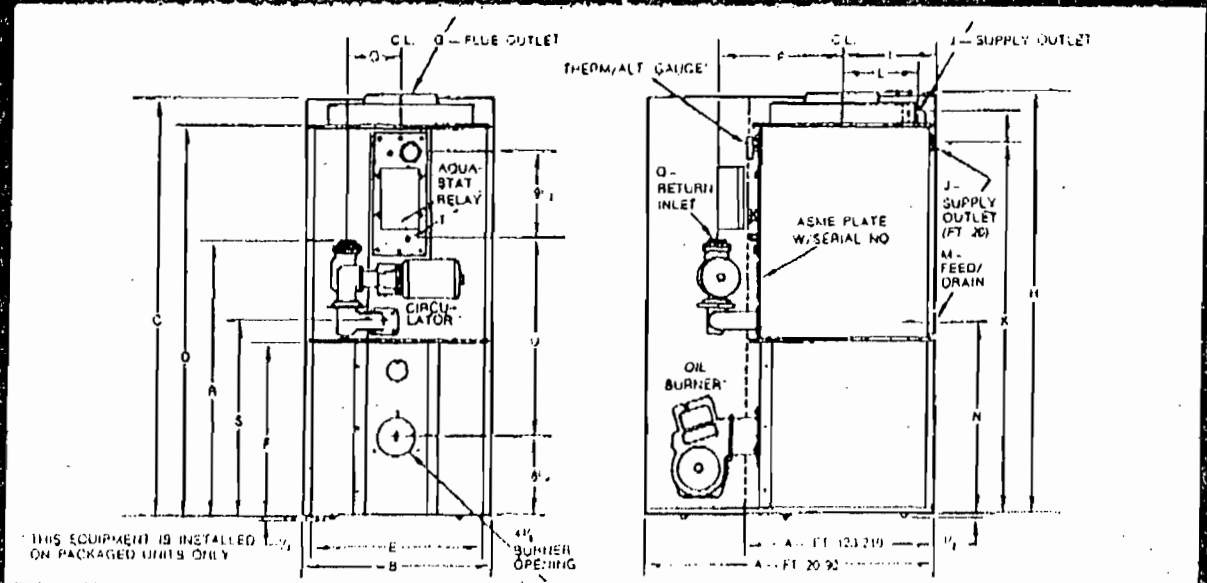


BOILER SIZE	FT-120	FT-150	FT-180	FT-120
"A"	25-3/4"	25-3/4"	29-3/4"	29-3/4"
"B"	25-1/2"	25-1/2"	29-1/2"	29-1/2"
"C"	53"	53"	54"	54"
APP. SHIP. WT.	525	550	725	750
FIRING RATE	2.5	3.0	4.0	4.5

SBI RATINGS AND DATA

Boiler Model No.	FT20	FT30	FT60	FT90	FT120	FT150	FT180	FT210
SBI Firing Rate—#2 Fuel Oil @ 140 MBTU/Gal.	1.10	1.25	1.65	2.00	2.48	3.05	4.00	4.50
Input—MBTU/Hr.	154	175	231	280	343	427	560	630
Gross SBI Output—MBTU/Hr.	114	132	171	198	260	324	398	453
Net SBI Water Rating—MBTU/Hr.*	99.1	114.8	148.7	172.2	226.1	281.7	344	394
Water Capacity—Gals.	12	22	20	28	33	31	44	41
No. of 3" Tubes	8	8	10	10	14	16	22	26
Tankless Coil Output—GPM	3	5	5	5	5	5	8	8
Approx. Shipping Weight	400	435	456	500	525	550	725	760

*The net SBI ratings are based on a piping and pickup factor of 1.15 as specified in the SBI Code. The manufacturer should be consulted before selecting a boiler for installations having unusual piping and pickup requirements. For forced hot water systems where the boiler and all the piping are within the area to be heated, the boiler may be selected on the basis of its Gross Output.



DIMENSIONS

			FT20	FT30	FT60	FT90	FT120	FT150	FT180	FT210
Casing	A	Length ¹	28	32	32	32	26 1/4	25 1/4	29 1/4	29 1/4
	B	Width	17 1/2	21	21	21	25 1/2	25 1/2	29 1/2	29 1/2
	C	Height	44 1/2	45	45	51	53	53	54	54
Boiler	D	Height	41 1/2	42	42	48	48	48	48	48
	E	Diameter	15	19	19	19	22	22	28	28
	F	Base Hgt.	18	18 1/2	18 1/2	18 1/2	18 1/4	18 1/2	18 1/2	18 1/2
Flue Outlet	G	Size	8	8	8	8	10	10	10	10
	H	Height	45 1/2	48	46	52	53 1/2	53 1/2	54 1/2	54 1/2
	I	C.L. to Rear	8 1/4	10 1/2	10 1/4	10 1/2	12 1/4	12 1/4	14 1/4	14 1/4
Supply Outlet	J	Size	1	1 1/4	1 1/4	1 1/4	1 1/4	1 1/4	2	2
	K	Height	39 1/2	44	44	50	50	50	49	49
	L	C.L. to Outlet	—	8 1/4	8 1/4	8 1/4	9 1/2	9 1/2	11 1/2	11 1/2
Feed/Drain	M	Size	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	2	2
	N	Height	20 1/4	20 1/2	20 1/2	20 1/2	20 1/4	20 1/4	21	21
Return Inlet	O	Size	1	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	2	2
	P	C.L. to Inlet	—	13 1/2	13 1/2	13 1/2	—	—	—	—
	Q	C.L. to Inlet	—	5 1/4	5 1/4	5 1/4	—	—	—	—
	R	Height—Pack.	—	30	30	30	—	—	—	—
Coil Conn.	S	Height—KD	18 1/4	20 1/4	20 1/4	20 1/4	20 1/2	20 1/2	20 1/4	20 1/4
	T	Nominal Size	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
	U	Height	See Note ²	21 1/2	21 1/2	27 1/2	27 1/2	27 1/2	27 1/2	27 1/2

1. FT20-00 Casings are extended; fully packaged only
 FT-120-210 Casings are flush; shipped KD only
 2. Coil connections are on top of FT20 boiler

Chimney Sizes: FT20 - 6" x 6" x 15"
 FT30 to FT90 - 8" x 8" x 20"
 FT120 to 210 - 10" x 10" x 20"

America's most trusted name in commercial and residential boilers.

COLUMBIA BOILER

BOX G, POTTSTOWN, PA., 19464

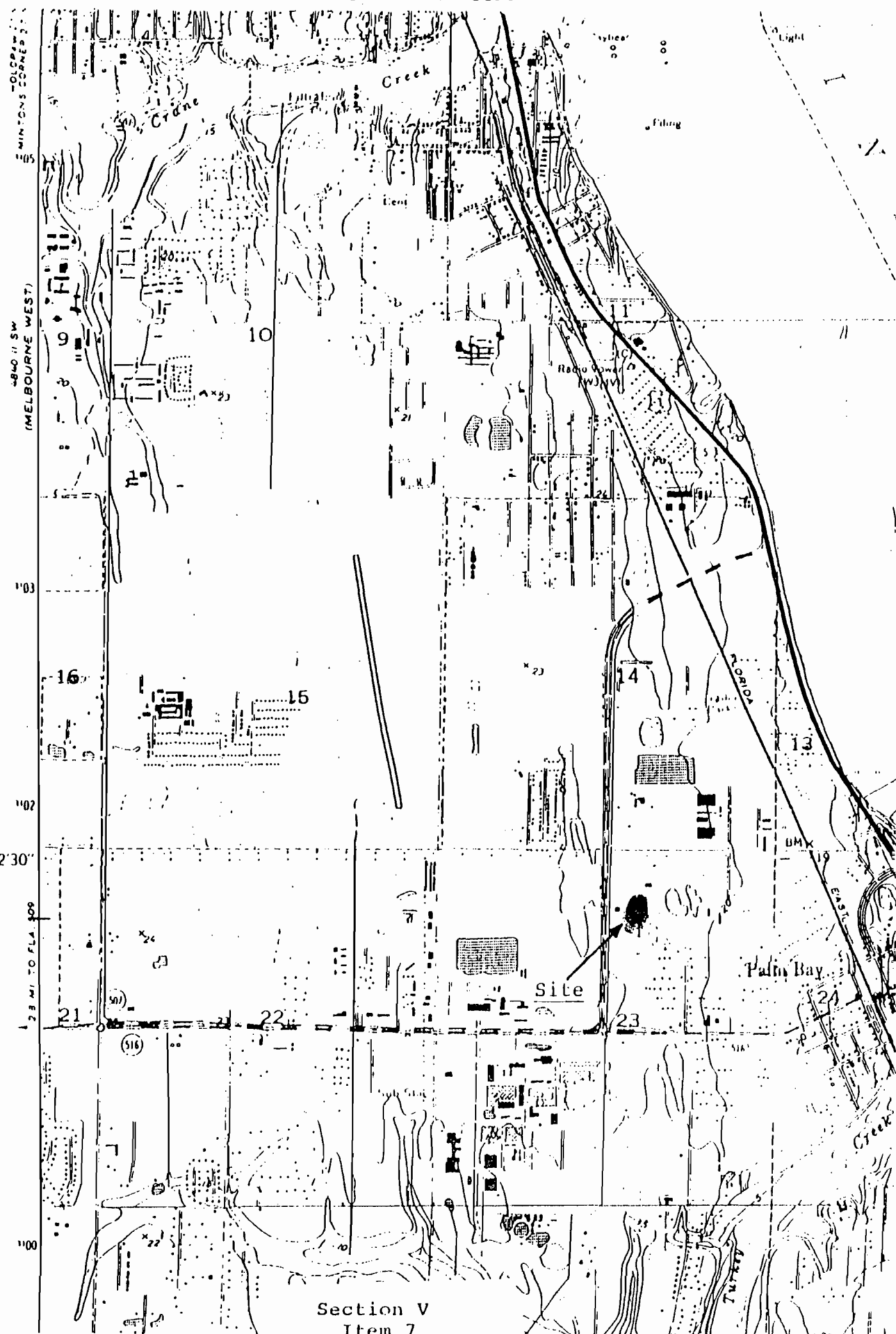
Section V

Item 6A

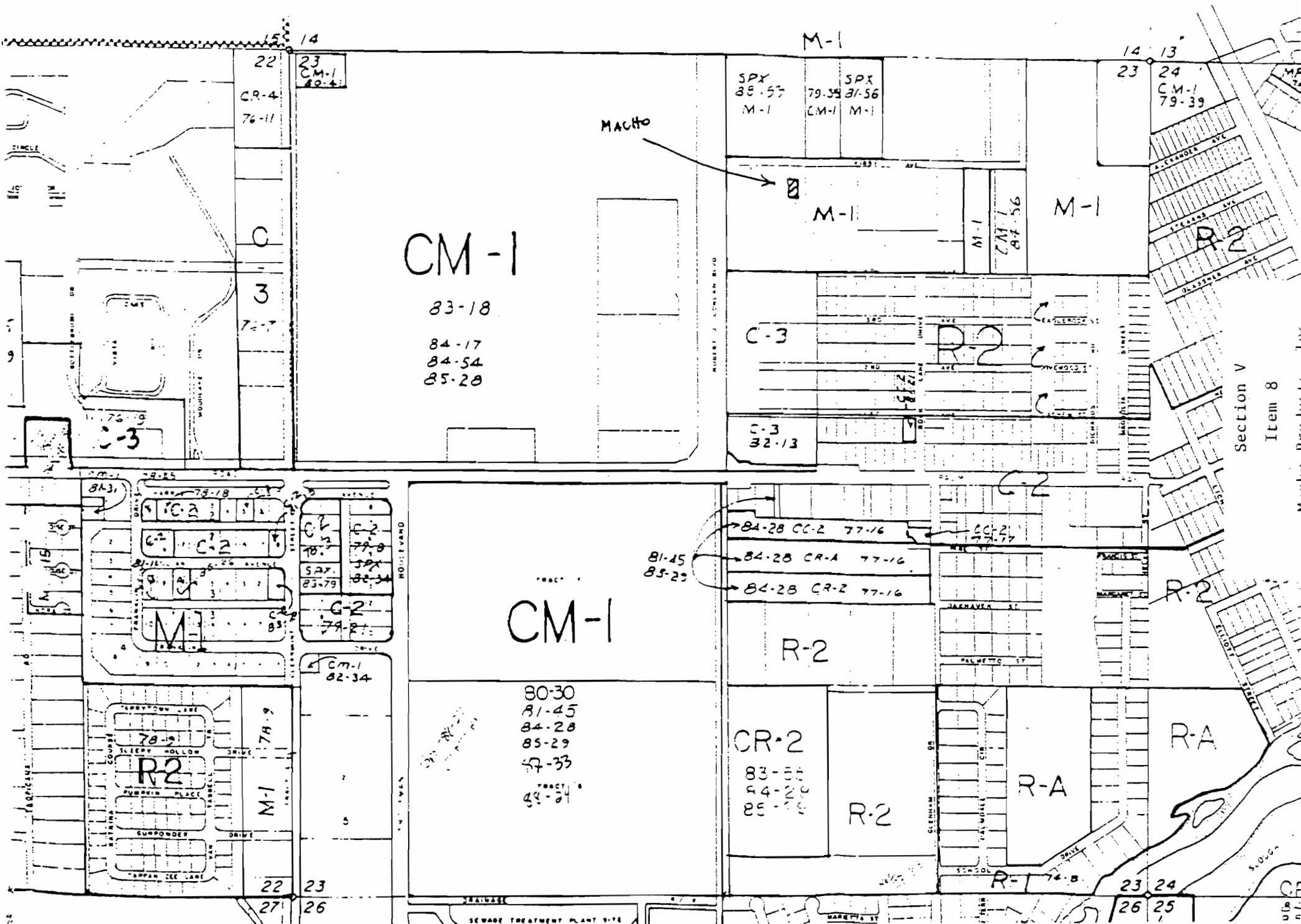


Meets requirements of ASME Boiler and

Reg. U.S. PAT.



Section V
Item 7



Section V
Item 8

RECEIVED

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DER-BAQM

AIR DISPERSION MODELING RESULTS
IN SUPPORT OF
Air Construction Permit Application
May 15, 1989

Macho Products, Inc.
PALM BAY, FLORIDA

Cross/Tessitore & Associates, P.A.
4763 South Conway Road, Suite F
Orlando, Florida 32812
(407)851-1484
R0116

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1.0 INTRODUCTION

C/TA was retained by Macho Products, Inc. to assist in preparing and submitting an Application To Construct Air Pollution Sources to the Florida Department of Environmental Regulation for the emission of volatile organic compounds (VOCs). Macho Products, Inc. is currently under regulatory action to achieve compliance with the FDER regulations and submit a permit application.

As a part of the permitting process, a new requirement has been added to model ground level concentrations (GLC's) for air toxics (i.e., VOCs).

To properly vent the unit operations at the plant, a new ventilation system is being constructed which will exhaust VOC's through a new 45' stack. (See Figure 1) The ventilation system design and the construction permit application also reflect an 85% increase in emissions to accommodate any anticipated increase in production.

2.0 PROCEDURES

Based upon the emission inventory, threshold limit values (TLV's), and model selection, C/TA has estimated ground level concentrations (GLC's) at the Macho Products, Inc. facility in Palm Bay, Florida.

2.1 VOC INDICATOR SELECTION

Toluene was selected as the compound to model based on the TLV and the annual consumption. (See Table 1)

2.2 MODEL SELECTION

After conversations with the FDER in Orlando (John Turner) and the FDER in Tallahassee (Tom Rogers), the decision was made to use the Industrial Source Complex Model in the short term mode (ISCST) with a screening run using default conditions. The model constraints are listed in Table 2.

2.3 EMISSION INVENTORY

The emission inventory used in the model is for the new single stack venting of the VOC emissions. (See Table 3)

3.0 CONCLUSIONS

This preliminary study, using Toluene as the solvent with the highest use factor and lowest threshold limit value indicates: (See Table 4)

- 1) The allowable GLC (1/100 x 100ppm TLV for Category A Compounds) is 1.0 ppm for toluene.
- 2) With an 85% increase in solvent usage and a 45 ft stack [good engineering practice (GEP)], the GLC's are acceptable (0.615 ppm at 300 meters downwind).

TABLE 1
SELECTION OF INDICATOR VOC

Compound	Annual Consumption (lbs) (1)	TLV (ppm)
Toluene	183,040 ⁽²⁾	100
MIBK	15,540	50
Xylene	6,660	100

(1) Increased by 85%

(2) Density of Toluene = 7.3 lbs/gal

Note: Equipment operates 40 hr/wk; 52 wk/yr

TABLE 2
MODEL CONDITIONS

<u>Parameter</u>	<u>Value</u>	
•Mixing Depth:	1000 m	
•Topography Set:	Rural	
•Temperature:	293°K	
•Receptors:	25,50,75, 100,200,.....4000 m	
•Wind Speeds:	<u>Stability Category</u>	<u>Wind Speed (m/s)</u>
	A	1-3
	B	1-5
	C	1-10,12,14,16, 18, 20
	D	Same as C
	E	1-5

TABLE 3

EMISSION INVENTORY

Source	Coordinates (Meters)		Stack Diameter (feet)	Stack Area (ft ²)	Exit Temp (°F)	Gas Flow (ft ³ /min)	Stack Height (ft)	Exit Velocity (ft/min)	Toluene Emission (lbs/hr)
	X	Y							
New Stack	0	0	0.833	0.545	70	1595	45	2926.6	88.0

5

Note: Building Dimensions

210' x 80' x 18' (height varies form 16-18': 18' at location of new stack)

TABLE 4

COMPARISON OF GLC WITH MAXIMUM ALLOWABLE

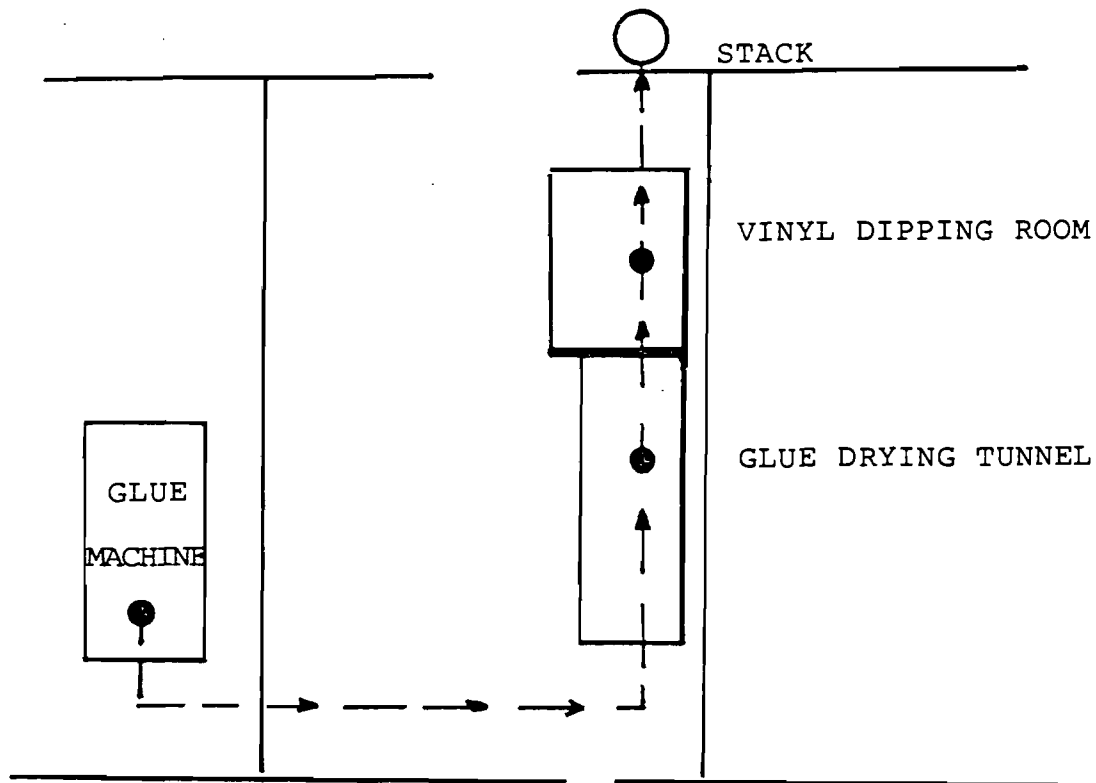
<u>Compound</u>	<u>Hourly Consumption</u>	<u>Actual GLC*</u>	<u>Maximum Allowable GLC**</u>
Toluene	88.0 lb/hr	0.615 ppm	1.0 ppm

*Ground level concentration. Actual GLC is based on worst modeling scenario measured at 300 meters downwind utilizing a 45 ft stack.

**Ground level concentration based on Y100 of TLB for toluene (100 ppm) based on 40 hr/wk operation

FIGURE 1

STACK LOCATION FOR MODELING VOC EMISSIONS



7

NOTE

● HOOD PICK UP POINTS

-----> DUCT SYSTEM

NOT TO SCALE

CROSS/TESSITORE & ASSOC., P.A.
ENVIRONMENTAL ENGINEERS ORLANDO, FLORIDA

APPENDICES

- (A) ISCST MODELING COMPUTER RESULTS
- (B) GLC CALCULATIONS

APPENDIX A

ISCST MODELING COMPUTER RESULTS

ISCST - VERSION 3.4 (DATED 88348)

IBM-PC VERSION (1.64)

(C) COPYRIGHT 1988, TRINITY CONSULTANTS, INC.

SERIAL NUMBER 5070 SOLD TO CROSS/TESSITORE & ASSOC.

RUN BEGAN ON 05-10-89 AT 14:02:08

NOTE THAT THE BUILDING DIMENSIONS ON CARD 6,1 FOR SOURCE NO. 1 DO NOT MEET THE SCHULMAN-SCIRE CRITERIA.
THEREFORE, DIRECTION SPECIFIC BUILDING DIMENSIONS WILL NOT BE USED BY THE MODEL.

*** Macho Products - Screening

CALCULATE (CONCENTRATION=1,DEPOSITION=2)	ISW(1) = 1
RECEPTOR GRID SYSTEM (RECTANGULAR=1 OR 3, POLAR=2 OR 4)	ISW(2) = 3
DISCRETE RECEPTOR SYSTEM (RECTANGULAR=1,POLAR=2)	ISW(3) = 1
TERRAIN ELEVATIONS ARE READ (YES=1,NO=0)	ISW(4) = 0
CALCULATIONS ARE WRITTEN TO TAPE (YES=1,NO=0)	ISW(5) = 0
LIST ALL INPUT DATA (NO=0,YES=1,MET DATA ALSO=2)	ISW(6) = 2
COMPUTE AVERAGE CONCENTRATION (OR TOTAL DEPOSITION)	
WITH THE FOLLOWING TIME PERIODS:	
HOURLY (YES=1,NO=0)	ISW(7) = 1
2-HOUR (YES=1,NO=0)	ISW(8) = 0
3-HOUR (YES=1,NO=0)	ISW(9) = 0
4-HOUR (YES=1,NO=0)	ISW(10) = 0
6-HOUR (YES=1,NO=0)	ISW(11) = 0
8-HOUR (YES=1,NO=0)	ISW(12) = 0
12-HOUR (YES=1,NO=0)	ISW(13) = 0
24-HOUR (YES=1,NO=0)	ISW(14) = 0
PRINT 'N'-DAY TABLE(S) (YES=1,NO=0)	ISW(15) = 0
PRINT THE FOLLOWING TYPES OF TABLES WHOSE TIME PERIODS ARE	
SPECIFIED BY ISW(7) THROUGH ISW(14):	
DAILY TABLES (YES=1,NO=0)	ISW(16) = 0
HIGHEST & SECOND HIGHEST TABLES (YES=1,NO=0)	ISW(17) = 1
MAXIMUM 50 TABLES (YES=1,NO=0)	ISW(18) = 0
METEOROLOGICAL DATA INPUT METHOD (PRE-PROCESSED=1,CARD=2)	ISW(19) = 2
RURAL-URBAN OPTION (RU.=0,UR. MODE 1=1,UR. MODE 2=2,UR. MODE 3=3)	ISW(20) = 0
WIND PROFILE EXPONENT VALUES (DEFAULTS=1,USER ENTERS=2,3)	ISW(21) = 1
VERTICAL POT. TEMP. GRADIENT VALUES (DEFAULTS=1,USER ENTERS=2,3)	ISW(22) = 1
SCALE EMISSION RATES FOR ALL SOURCES (NO=0,YES)0)	ISW(23) = 0
PROGRAM CALCULATES FINAL PLUME RISE ONLY (YES=1,NO=2)	ISW(24) = 1
PROGRAM ADJUSTS ALL STACK HEIGHTS FOR DOWNWASH (YES=2,NO=1)	ISW(25) = 2
PROGRAM USES BUOYANCY INDUCED DISPERSION (YES=1,NO=2)	ISW(26) = 1
CONCENTRATIONS DURING CALM PERIODS SET = 0 (YES=1,NO=2)	ISW(27) = 2
REG. DEFAULT OPTION CHOSEN (YES=1,NO=2)	ISW(28) = 2
TYPE OF POLLUTANT TO BE MODELLED (1=SO2,2=OTHER)	ISW(29) = 2
DEBUG OPTION CHOSEN (YES=1,NO=2)	ISW(30) = 2
ABOVE GROUND (FLAGPOLE) RECEPTORS USED (YES=1,NO=0)	ISW(31) = 0
NUMBER OF INPUT SOURCES	NSOURC = 1
NUMBER OF SOURCE GROUPS (=0,ALL SOURCES)	NGROUP = 0
TIME PERIOD INTERVAL TO BE PRINTED (=0,ALL INTERVALS)	IPERD = 0
NUMBER OF X (RANGE) GRID VALUES	NXPNTS = 40
NUMBER OF Y (THETA) GRID VALUES	NYPNTS = 1
NUMBER OF DISCRETE RECEPTORS	NXWYPT = 3
NUMBER OF HOURS PER DAY IN METEOROLOGICAL DATA	NHOURS = 24
NUMBER OF DAYS OF METEOROLOGICAL DATA	NDAYS = 2
SOURCE EMISSION RATE UNITS CONVERSION FACTOR	TK = 10000E+07
HEIGHT ABOVE GROUND AT WHICH WIND SPEED WAS MEASURED	ZR = 10.00 METERS
LOGICAL UNIT NUMBER OF METEOROLOGICAL DATA	IMET = 5
ALLOCATED DATA STORAGE	LIMIT = 43500 WORDS
REQUIRED DATA STORAGE FOR THIS PROBLEM RUN	MIMIT = 635 WORDS

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*** UPPER BOUND OF FIRST THROUGH FIFTH WIND SPEED CATEGORIES ***
(METERS/SEC)

1.54, 3.09, 5.14, 8.23, 10.00,

*** X-COORDINATES OF RECTANGULAR GRID SYSTEM ***
(METERS)

100.0,	200.0,	300.0,	400.0,	500.0,	600.0,	700.0,	800.0,	900.0,	1000.0,
1100.0,	1200.0,	1300.0,	1400.0,	1500.0,	1600.0,	1700.0,	1800.0,	1900.0,	2000.0,
2100.0,	2200.0,	2300.0,	2400.0,	2500.0,	2600.0,	2700.0,	2800.0,	2900.0,	3000.0,
3100.0,	3200.0,	3300.0,	3400.0,	3500.0,	3600.0,	3700.0,	3800.0,	3900.0,	4000.0,

*** Y-COORDINATES OF RECTANGULAR GRID SYSTEM ***
(METERS)

.0,

*** X,Y COORDINATES OF DISCRETE RECEPTORS ***
(METERS)

(25.0, .0), (50.0, .0), (75.0, .0), (

*** Macho Products - Screening

*** SOURCE DATA ***

SOURCE NUMBER	P E	K CATS.	PART.	EMISSION RATE (GRAMS/SEC) TYPE=2	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	HEIGHT (METERS)	TEMP.	EXIT VEL.	BLDG. HEIGHT (METERS)	BLDG. LENGTH (METERS)	BLDG. WIDTH (METERS)	
									TYPE=0 (DEG.K); VERT.DIM (METERS)	TYPE=0 (M/SEC); HORZ.DIM (METERS)				
1	0	0	0	.11008E+02	.0	.0	.0	13.72	294.26	14.86	.25	4.88	56.71	56.71

*** Macho Products - Screening

* METEOROLOGICAL DATA FOR DAY 1 *

HOUR -----	FLOW VECTOR (DEGREES)	WIND SPEED (MPS)	MIXING HEIGHT (METERS)	TEMP. (DEG. K)	POT. TEMP. GRADIENT (DEG. K PER METER)	STABILITY CATEGORY	WIND PROFILE EXPONENT	DECAY COEFFICIENT (PER SEC)
1	90.0	1.00	1000.0	293.0	.0000	1	.0700	.000000E+00
2	90.0	2.00	1000.0	293.0	.0000	1	.0700	.000000E+00
3	90.0	3.00	1000.0	293.0	.0000	1	.0700	.000000E+00
4	90.0	1.00	1000.0	293.0	.0000	2	.0700	.000000E+00
5	90.0	2.00	1000.0	293.0	.0000	2	.0700	.000000E+00
6	90.0	3.00	1000.0	293.0	.0000	2	.0700	.000000E+00
7	90.0	4.00	1000.0	293.0	.0000	2	.0700	.000000E+00
8	90.0	5.00	1000.0	293.0	.0000	2	.0700	.000000E+00
9	90.0	1.00	1000.0	293.0	.0000	3	.1000	.000000E+00
10	90.0	2.00	1000.0	293.0	.0000	3	.1000	.000000E+00
11	90.0	3.00	1000.0	293.0	.0000	3	.1000	.000000E+00
12	90.0	4.00	1000.0	293.0	.0000	3	.1000	.000000E+00
13	90.0	5.00	1000.0	293.0	.0000	3	.1000	.000000E+00
14	90.0	6.00	1000.0	293.0	.0000	3	.1000	.000000E+00
15	90.0	7.00	1000.0	293.0	.0000	3	.1000	.000000E+00
16	90.0	8.00	1000.0	293.0	.0000	3	.1000	.000000E+00
17	90.0	9.00	1000.0	293.0	.0000	3	.1000	.000000E+00
18	90.0	10.00	1000.0	293.0	.0000	3	.1000	.000000E+00
19	90.0	12.00	1000.0	293.0	.0000	3	.1000	.000000E+00
20	90.0	14.00	1000.0	293.0	.0000	3	.1000	.000000E+00
21	90.0	16.00	1000.0	293.0	.0000	3	.1000	.000000E+00
22	90.0	18.00	1000.0	293.0	.0000	3	.1000	.000000E+00
23	90.0	20.00	1000.0	293.0	.0000	3	.1000	.000000E+00
24	90.0	1.00	1000.0	293.0	.0000	4	.1500	.000000E+00

*** Macho Products - Screening

* METEOROLOGICAL DATA FOR DAY 2 *

HOUR	FLOW VECTOR (DEGREES)	WIND SPEED (MPS)	MIXING HEIGHT (METERS)	TEMP. (DEG. K)	POT. TEMP. GRADIENT (DEG. K PER METER)	STABILITY CATEGORY	WIND PROFILE EXPONENT	DECAY COEFFICIENT (PER SEC)
1	90.0	2.00	1000.0	293.0	.0000	4	.1500	.000000E+00
2	90.0	3.00	1000.0	293.0	.0000	4	.1500	.000000E+00
3	90.0	4.00	1000.0	293.0	.0000	4	.1500	.000000E+00
4	90.0	5.00	1000.0	293.0	.0000	4	.1500	.000000E+00
5	90.0	6.00	1000.0	293.0	.0000	4	.1500	.000000E+00
6	90.0	7.00	1000.0	293.0	.0000	4	.1500	.000000E+00
7	90.0	8.00	1000.0	293.0	.0000	4	.1500	.000000E+00
8	90.0	9.00	1000.0	293.0	.0000	4	.1500	.000000E+00
9	90.0	10.00	1000.0	293.0	.0000	4	.1500	.000000E+00
10	90.0	12.00	1000.0	293.0	.0000	4	.1500	.000000E+00
11	90.0	14.00	1000.0	293.0	.0000	4	.1500	.000000E+00
12	90.0	16.00	1000.0	293.0	.0000	4	.1500	.000000E+00
13	90.0	18.00	1000.0	293.0	.0000	4	.1500	.000000E+00
14	90.0	20.00	1000.0	293.0	.0000	4	.1500	.000000E+00
15	90.0	1.20	1000.0	293.0	.0200	5	.3500	.000000E+00
16	90.0	2.00	1000.0	293.0	.0200	5	.3500	.000000E+00
17	90.0	3.00	1000.0	293.0	.0200	5	.3500	.000000E+00
18	90.0	4.00	1000.0	293.0	.0200	5	.3500	.000000E+00
19	90.0	5.00	1000.0	293.0	.0200	5	.3500	.000000E+00
20	90.0	1.00	1000.0	293.0	.0350	6	.5500	.000000E+00
21	90.0	2.00	1000.0	293.0	.0350	6	.5500	.000000E+00
22	90.0	3.00	1000.0	293.0	.0350	6	.5500	.000000E+00
23	90.0	4.00	1000.0	293.0	.0350	6	.5500	.000000E+00
24	90.0	5.00	1000.0	293.0	.0350	6	.5500	.000000E+00

HIGH
1-HR
SGROUP# 1

*** Macho Products - Screening ***

* HIGHEST 1-HOUR AVERAGE CONCENTRATION (MICROGRAMS/CUBIC METER) *
* FROM ALL SOURCES *
* FOR THE RECEPTOR GRID *

* MAXIMUM VALUE EQUALS 2349.77800 AND OCCURRED AT (300.0, .0) *

Y-AXIS / X-AXIS (METERS)
(METERS) / 100.0 200.0 300.0 400.0 500.0

.0 / 1987.74700 (1, 1) 2285.46000 (1, 9) 2349.77800 (1, 9) 2115.54200 (1,24) 2089.53500 (1,24)

HIGH
1-HR
SGROUP# 1

*** Macho Products - Screening ***

* HIGHEST 1-HOUR AVERAGE CONCENTRATION (MICROGRAMS/CUBIC METER) *
* FROM ALL SOURCES *
* FOR THE RECEPTOR GRID *

* MAXIMUM VALUE EQUALS 2349.77800 AND OCCURRED AT (300.0, .0) *

Y-AXIS / X-AXIS (METERS)
(METERS) / 600.0 700.0 800.0 900.0 1000.0

.0 / 2089.45500 (2,15) 2021.97300 (2,20) 2155.87600 (2,20) 2198.58600 (2,20) 2181.64100 (2,20)

HIGH
1-HR
SGROUP# 1

*** Macho Products - Screening ***

* HIGHEST 1-HOUR AVERAGE CONCENTRATION (MICROGRAMS/CUBIC METER) *
* FROM ALL SOURCES *
* FOR THE RECEPTOR GRID *

* MAXIMUM VALUE EQUALS 2349.77800 AND OCCURRED AT (300.0, .0) *

Y-AXIS / X-AXIS (METERS)
(METERS) / 1100.0 1200.0 1300.0 1400.0 1500.0

.0 / 2118.98200 (2,20) 2040.08800 (2,20) 1953.22700 (2,20) 1863.62800 (2,20) 1774.53600 (2,20)

HIGH
1-HR
SGROUP# 1

*** Macho Products - Screening ***

* HIGHEST 1-HOUR AVERAGE CONCENTRATION (MICROGRAMS/CUBIC METER) *
* FROM ALL SOURCES *
* FOR THE RECEPTOR GRID *

* MAXIMUM VALUE EQUALS 2349.77800 AND OCCURRED AT (300.0, .0) *

Y-AXIS / X-AXIS (METERS)
(METERS) / 1600.0 1700.0 1800.0 1900.0 2000.0

.0 / 1687.90500 (2,20) 1604.85600 (2,20) 1525.97500 (2,20) 1451.50900 (2,20) 1381.48700 (2,20)

HIGH
1-HR
SGROUP# 1

*** Macho Products - Screening ***

* HIGHEST 1-HOUR AVERAGE CONCENTRATION (MICROGRAMS/CUBIC METER) *
* FROM ALL SOURCES *
* FOR THE RECEPTOR GRID *

* MAXIMUM VALUE EQUALS 2349.77800 AND OCCURRED AT (300.0, .0) *

Y-AXIS / X-AXIS (METERS)
(METERS) / 2100.0 2200.0 2300.0 2400.0 2500.0

.0 / 1316.74600 (2,20) 1256.50200 (2,20) 1200.40000 (2,20) 1148.10400 (2,20) 1099.30500 (2,20)

HIGH
1-HR
SGROUP# 1

*** Macho Products - Screening ***

* HIGHEST 1-HOUR AVERAGE CONCENTRATION (MICROGRAMS/CUBIC METER) *
* FROM ALL SOURCES *
* FOR THE RECEPTOR GRID *

* MAXIMUM VALUE EQUALS 2349.77800 AND OCCURRED AT (300.0, .0) *

Y-AXIS / X-AXIS (METERS)
(METERS) / 2600.0 2700.0 2800.0 2900.0 3000.0

.0 / 1053.71500 (2,20) 1011.07000 (2,20) 971.12900 (2,20) 933.67410 (2,20) 898.50650 (2,20)

HIGH
1-HR
SGROUP# 1

*** Macho Products - Screening ***

* HIGHEST 1-HOUR AVERAGE CONCENTRATION (MICROGRAMS/CUBIC METER) *
* FROM ALL SOURCES *
* FOR THE RECEPTOR GRID *

* MAXIMUM VALUE EQUALS 2349.77800 AND OCCURRED AT (300.0, .0) *

Y-AXIS / (METERS) /	3100.0	3200.0	X-AXIS (METERS) 3300.0	3400.0	3500.0
------------------------	--------	--------	---------------------------	--------	--------

.0 /	866.46500 (2,20)	836.33450 (2,20)	807.95900 (2,20)	781.20000 (2,20)	755.93130 (2,20)
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HIGH
1-HR
SGROUP# 1

*** Macho Products - Screening ***

* HIGHEST 1-HOUR AVERAGE CONCENTRATION (MICROGRAMS/CUBIC METER) *
* FROM ALL SOURCES *
* FOR THE RECEPTOR GRID *

* MAXIMUM VALUE EQUALS 2349.77800 AND OCCURRED AT (300.0, .0) *

Y-AXIS / (METERS) /	3600.0	3700.0	X-AXIS (METERS) 3800.0	3900.0	4000.0
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.0 /	732.03700 (2,20)	709.41700 (2,20)	687.97500 (2,20)	667.62920 (2,20)	648.30020 (2,20)
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HIGH
1-HR
SGROUP# 1

*** Macho Products - Screening ***

* HIGHEST 1-HOUR AVERAGE CONCENTRATION (MICROGRAMS/CUBIC METER) *
* FROM ALL SOURCES *
* FOR THE DISCRETE RECEPTOR POINTS *

- X -	- Y -	CON.	(DAY, HOUR)	- X -	- Y -	CON.	(DAY, HOUR)
25.0	.0	1.87835	(1, 3)	50.0	.0	645.48760	(1, 3)
75.0	.0	1551.62700	(1, 2)				

2ND HIGH
1-HR
SGROUP# 1

*** Macho Products - Screening ***

* SECOND HIGHEST 1-HOUR AVERAGE CONCENTRATION (MICROGRAMS/CUBIC METER) *
* FROM ALL SOURCES *
* FOR THE RECEPTOR GRID *

* MAXIMUM VALUE EQUALS 2231.82300 AND OCCURRED AT (200.0, .0) *

Y-AXIS / X-AXIS (METERS)
(METERS) / 100.0 200.0 300.0 400.0 500.0

.0 / 1784.63700 (1, 2) 2231.82300 (1, 4) 1782.00100 (2, 1) 1867.05800 (1, 9) 2086.32700 (2, 15)

2ND HIGH
1-HR
SGROUP# 1

*** Macho Products - Screening ***

* SECOND HIGHEST 1-HOUR AVERAGE CONCENTRATION (MICROGRAMS/CUBIC METER) *
* FROM ALL SOURCES *
* FOR THE RECEPTOR GRID *

* MAXIMUM VALUE EQUALS 2231.82300 AND OCCURRED AT (200.0, .0) *

Y-AXIS / X-AXIS (METERS)
(METERS) / 600.0 700.0 800.0 900.0 1000.0

.0 / 1906.68900 (1, 24) 1977.43500 (2, 15) 1823.35500 (2, 15) 1661.90100 (2, 15) 1508.17100 (2, 15)

2ND HIGH
1-HR
SGROUP# 1

*** Macho Products - Screening ***

* SECOND HIGHEST 1-HOUR AVERAGE CONCENTRATION (MICROGRAMS/CUBIC METER) *
* FROM ALL SOURCES *
* FOR THE RECEPTOR GRID *

* MAXIMUM VALUE EQUALS 2231.82300 AND OCCURRED AT (200.0, .0) *

Y-AXIS / X-AXIS (METERS)
(METERS) / 1100.0 1200.0 1300.0 1400.0 1500.0

.0 / 1371.15900 (2, 15) 1250.68800 (2, 15) 1144.88900 (2, 15) 1052.46500 (2, 21) 992.35510 (2, 21)

2ND HIGH
1-HR
SGROUP# 1

*** Macho Products - Screening

* SECOND HIGHEST 1-HOUR AVERAGE CONCENTRATION (MICROGRAMS/CUBIC METER) *
* FROM ALL SOURCES *
* FOR THE RECEPTOR GRID *

* MAXIMUM VALUE EQUALS 2231.82300 AND OCCURRED AT (200.0, .0) *

Y-AXIS / (METERS) /	1600.0	1700.0	1800.0	1900.0	2000.0
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.0 /	935.92460 (2,21)	883.30470 (2,21)	834.43580 (2,21)	789.15230 (2,21)	747.23580 (2,21)
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2ND HIGH
1-HR
SGROUP# 1

*** Macho Products - Screening

* SECOND HIGHEST 1-HOUR AVERAGE CONCENTRATION (MICROGRAMS/CUBIC METER) *
* FROM ALL SOURCES *
* FOR THE RECEPTOR GRID *

* MAXIMUM VALUE EQUALS 2231.82300 AND OCCURRED AT (200.0, .0) *

Y-AXIS / (METERS) /	2100.0	2200.0	2300.0	2400.0	2500.0
------------------------	--------	--------	--------	--------	--------

.0 /	789.38520 (2,21)	674.48750 (2,21)	642.25340 (2,21)	612.42610 (2,21)	584.77580 (2,21)
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2ND HIGH
1-HR
SGROUP# 1

*** Macho Products - Screening

* SECOND HIGHEST 1-HOUR AVERAGE CONCENTRATION (MICROGRAMS/CUBIC METER) *
* FROM ALL SOURCES *
* FOR THE RECEPTOR GRID *

* MAXIMUM VALUE EQUALS 2231.82300 AND OCCURRED AT (200.0, .0) *

Y-AXIS / (METERS) /	2600.0	2700.0	2800.0	2900.0	3000.0
------------------------	--------	--------	--------	--------	--------

.0 /	559.09750 (2,21)	535.20840 (2,21)	512.94540 (2,21)	492.16310 (2,21)	472.73190 (2,21)
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2ND HIGH
1-HR
SGROUP# 1

*** Macho Products - Screening ***

* SECOND HIGHEST 1-HOUR AVERAGE CONCENTRATION (MICROGRAMS/CUBIC METER) *
* FROM ALL SOURCES *
* FOR THE RECEPTOR GRID *

* MAXIMUM VALUE EQUALS 2231.82300 AND OCCURRED AT (200.0, .0) *

Y-AXIS / (METERS) /	3100.0	3200.0	3300.0	3400.0	3500.0
------------------------	--------	--------	--------	--------	--------

.0 /	455.18640 (2,21)	438.73480 (2,21)	423.28330 (2,21)	408.74840 (2,21)	395.05500 (2,21)
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2ND HIGH
1-HR
SGROUP# 1

*** Macho Products - Screening ***

* SECOND HIGHEST 1-HOUR AVERAGE CONCENTRATION (MICROGRAMS/CUBIC METER) *
* FROM ALL SOURCES *
* FOR THE RECEPTOR GRID *

* MAXIMUM VALUE EQUALS 2231.82300 AND OCCURRED AT (200.0, .0) *

Y-AXIS / (METERS) /	3600.0	3700.0	3800.0	3900.0	4000.0
------------------------	--------	--------	--------	--------	--------

.0 /	382.13610 (2,21)	369.93110 (2,21)	358.38550 (2,21)	347.45000 (2,21)	337.00000 (2,21)
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2ND HIGH
1-HR
SGROUP# 1

*** Macho Products - Screening ***

* SECOND HIGHEST 1-HOUR AVERAGE CONCENTRATION (MICROGRAMS/CUBIC METER) *
* FROM ALL SOURCES *
* FOR THE DISCRETE RECEPTOR POINTS *

- X -	- Y -	CON.	(DAY, HOUR)	- X -	- Y -	CON.	(DAY, HOUR)
25.0	.0	.80145	(1, 2)	50.0	.0	553.26780	(1, 2)
75.0	.0	1375.02400	(1, 3)				

RUN ENDED ON 05-10-89 AT 14:02:47

APPENDIX B

GLC CALCULATIONS

Assumptions

Volume per mole at 70° F = 24.132194

Gram Molecular Weight Of Toluene = 92.13

300 Meter Downwind GLC (Modeling Results) = 2349.77800 $\mu\text{g}/\text{m}^3$

Calculation

$$\text{ppm} = \frac{(\mu\text{g}/\text{cu. m}) \times (24.132194)}{(1000) \times (92.13)}$$

$$\text{ppm} = \frac{(2349.77800) \times (24.132194)}{(1000) \times (92.13)}$$

$$\text{ppm} = 0.615$$