

## State of Florida DEPARTMENT OF ENVIRONMENTAL REGULATION

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

# Interoffice Memorandum

TO: Steve Smallwood

FROM: Clair Fancy

DATE: June 20, 1990

SUBJ: Modification of Permit Number: AC 05-151435

Sea Ray Boats, Inc.

Attached for your approval and signature is a letter modifying the emission factors of Sea Ray Boat's permit for their Sykes Creek boat plant. The new factors more accurately reflect the actual emissions from the facility.

I recommend your approval and signature.

CF/JR/plm

Attachment



## 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

June 20, 1990

### CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. John A. Cronkhite Sr. Vice President/General Counsel Sea Ray Boats, Inc. 2600 Sea Ray Blvd. Knoxville, TN 37914

Dear Mr. Cronkhite:

Re: Revised Emission Factors - Sykes Creek Facility (Permit No. AC 05-151435)

The above permit is amended as stated below to reflect the revised emission factors in your letter dated May 7, 1990:

Present Specific Condition No. 4:

4. Hydrocarbon emissions (VOC) shall not exceed the following calculated values and total VOC emissions from the facility shall not exceed 30 lbs/hr, 480 lbs/day (30 day average), and 57.5 tons/year. Compliance shall be demonstrated by applying the following raw material utilization rates and emission factors over a 90-day period:

	Utilization Rate lbs/hr	Emission Factor	Emissions lbs/hr	
Styrene (Resin)	119.5	0.06	7.17	
Styrene (Gel Coat)	14.9	0.30	4.46.	
Methyl Methacrylate	49.5	0.05	2.48	
MEKP	4.7	0.10	0.47	
l,1,1-Trichloroethane	3.5	0.60	2.10	
Acetone	6.25	1.00	6.25	
Bottom Paint	11.7	0.60	7.02	

New Specific Condition No. 4:

4. Hydrocarbon emissions (VOC) shall not exceed the following calculated values and total VOC emissions from the facility shall not exceed 30 lbs/hr, 480 lbs/day (30 day average), and 57.5 tons/year. Compliance shall be demonstrated by applying the following raw material utilization rates and emission factors over a 90-day period.

Mr. John A. Cronkhite Page 2 June 20, 1990

New Specific Condition No. 4 cont'd:

	Utilization Rate lbs/hr	Emission Factor	Emissions lbs/hr	
Styrene (Resin)	119.5	0.06	7.17	
Styrene (Gel Coat)	14.9	0.30	4.46	
Methyl Methacrylate	49.5	0.05	2.48	
MEKP	4.7	0.10	0.47	
l,l,l-Trichloroethane	3.5	0.67	2.34	
Acetone	6.3	1.00	6.30	
Bottom Paint	11.7	0.60	7.02	

Present Specific Condition No. 8:

8. By January 31, 1990, Sea Ray Boats shall submit a conceptual plan and potential course of action that will provide the Department with reasonable assurance that objectionable odors and toxic air pollutants in quantities that could exceed acceptable ambient concentrations will not be discharged off of the facility's property boundary or where the public has access, whichever is closest, pursuant to F.A.C. Rules 17-2.200 and 17-2.620(1) and (2). The plan should contain at a minimum, but not be limited to, various control system strategies that might be installed to reduce or eventually eliminate emissions of VOC/OS from each type of operation, associated time and cost analyses, and VOC/OS substitutes.

### New Specific Condition No. 8:

8. By January 31, 1991, Sea Ray Boats shall submit a conceptual plan and potential course of action that will provide the Department with reasonable assurance that objectionable odors and toxic air pollutants in quantities that could exceed acceptable ambient concentrations will not be discharged off of the facility's property boundary or where the public has access, whichever is closest, pursuant to F.A.C. Rules 17-2.200 and 17-2.620(1) and (2). The plan should contain at a minimum, but not be limited to, various control system strategies that might be installed to reduce or eventually eliminate emissions of VOC/OS from each type of operation, associated time and cost analyses, and VOC/OS substitutes.

Mr. John A. Cronkhite Page 3 June 20, 1990

This amendment letter shall become attachment No. 3 to your construction permit AC 05-151435.

Sincerely,

STEVE SMALLWOOD, P.E.

Director

Division of Air Resources

Management

SS/JR/plm

c: C. Collins, Central District

G. E. Cantelou, Jr., P.E.

SENDER: Complete items 1 and 2 when additional 3 and 4.  Put your address in the "RETURN TO" Space on the reve	
card from being returned to you. The return receipt fee will p to and the date of delivery. For addit 1 fees the following	provide you the name of the person delivered
for fees and check box(es) for additional service(s) reques	ited.
<ol> <li>Show to whom delivered, date, and addressee's ac (Extra charge)</li> </ol>	ddress. 2.  Restricted Delivery (Extra charge)
3. Article Addressed to:	4 Article Number
John A - Cronkhite	V256 396 105
KIND WOOK I GEN. UNINGEL	Type of Service:
Si dice to Man	Registered Insured COD
dea kair island, fra	Certified COD  Express Mail Return Receipt for Merchandise
Sea Ray Boats Inc.	
Charville iTN 37914	Always obtain signature of addressee or agent and DATE DELIVERED.
5. Signature - Address	8. Addressee's Address (ONLY if
<b>X</b> (	requested and fee paid)
6. Signature - Agent NOV	,
x AMILO	<b>*</b> \
7. Date of Delivery 6-25	

### . Р 256 396 105

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED

NOT FOR INTERNATIONAL MAIL

(See Reverse)

☆U.S.G.P.O. 1989-234-555 Certified Fee Special Delivery Fee Restricted Delivery Fee Return Receipt showing to whom and Date Delivered PS Form 3800, June 1985 Return Receipt showing to whom, Date, and Address of Delivery TOTAL Postage and Fees Postmark or Date - 6-83-90 AC 05-151435



# RECEIVED

MAY 17 1990

May 7, 1990

DER - BAQM

Mr. Clair Fancy Chief Bureau of Air Regulation Florida Department of Environmental Regulation 2600 Blair Stone Road Tallahassee, FL 32399-2400

> AC05-151435 RE:

Sea Ray Boats, Inc. Sykes Creek Plant Merritt Island, Florida

Dear Mr. Fancy:

Please accept this letter as a formal request for two modifications to the referenced construction permit.

We have had discussions with Mr. Collins and Mr. Turner of the DER district office and are advised that we should have our construction permit modified to cover an exceedance discovered due to an underestimate of carpet glue required in the manufacture of certain models fo boats. Be advised that our original estimates (those contained in the construction permit application) were based entirely on theory since these boats had not been built before, and the actual use the glue was about ten percent greater than originally projected.

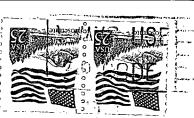
We therefore request that the facilities permitted emission rate of 1,1,1-trichloroethane be modified to 2.34 #/hr over an 8 hour period instead of 2.10 #/hr over a 16 hour period (permitted rate).

We also request that Specific Condition #8's due date be extended, since it was our intent to produce an air model using the parameters of the operation permit to demonstrate acceptable ambient concentrations.

Thank you for your considerations. If you have any questions, please call me at (803) 648-9300.

CC: J. Reynsteld B. andrews 401 Park Ave. S.W. / P.O. Box 3102 / Aiken, S.C. 29802 / (803) 648-9300 CANTEIOU ASSOULATES ENGINEERING - PLANNING 401 Park Ave. S.W. / P.O. Box 3102 / Aiken, S.C. 2980





Mr. Clair Fancy Chief Bureau of Air Regulation FL.Dept. of Environmental Regulation 2600 Blair Stone Road Tallahassee, FL. 32399-2400

n in the manufacture of the control of the control



May 3, 1990

Florida Department of Environmental Regulation 3319 Maguire Boulevard Suite 232 Orlando, Florida 32803-3767

Attention: John Turner

RE: Sea Ray Boats, Inc.

Completeness Air Summary

AC05-151435

Sykes Creek Plant

Merritt Island, Florida

Dear Mr. Turner:

The following items are submitted in response to your letter of April 18, 1990.

- Exhibit 1. Letter of authorization for Jeff Skuda.
- Exhibit 2. Calculated compliance results.
- Exhibit 3. Clarification of utilization rates, emission rates and assumptions, and potential emissions.
- Exhibit 4. Copy of letter to Mr. Clair Fancy regarding construction permit modification.
- Exhibit 5. Same as Exhibit "4" for conceptual plan for Permit Specific Condition No. 8.

The visible emission test results will be resubmitted when the permit applications for ACO5-165270 and ACO5-165271 are completed and submitted.

If you require additional information, please advise.

Yours truly

G. E. Cantelou. W. P.E.

GEC/sc

Enclosures



May 1, 1990

Florida Department of Environmental Regulation Air Resources Management Section 3319 Maguire Boulevard Orlando, FLorida 32803-3767

RE: Operational Permit (Ref. #ACO5-151435)

To Whom It May Concern:

Please be advised that Jeff Skuda is authorized by Sea Ray Boats, Inc., to sign and make application for our operational permit (noted above). If any additional information is needed, please feel free to contact me.

Thank you in advance for your cooperation.

Sincerely,

SEA RAY BOATS, INC.

Gary W. Stoecker

Senior Vice President/Manufacturing

GWS:cbh

### EXHIBIT "2"

	PERMITTED (#/HR)	ACTUAL (#/HR)
STYRENE (RESIN & GELCOAT)	11.63	9.07
METHYL METHACRYLATE	2.48	0.0
MEKP	0.47	0.06
1,1,1-TRICHLOROETHANE	2.10	2.34
ACETONE	6.25	4.18
BOTTOM PAINT	7.02	2.28

EXHIBIT "3"

ACTUAL EMISSIONS

STYRENE:

(9.07 #/hr) (48 wk/yr X 5 days/wk X B hr/day) = 17,414 #/yr = 8.7 T/yr

METHYL METHACRALATE:

NO LONGER A COMPONENT IN THE GELCOATS USED, STYRENE WAS SUBSTITUTED BY MANUFACTURER

MEK:

(0.06 #/hr) (48 wk/yr X 5 days/wk X 8 hr/day) = 115 #/yr = .06 T/yr

1,1,1-TRICHLOROETHANE:

(2.34 #/hr) (48 wk/yr X 5 days/wk X B hr/day) = 4,493 #/yr = 2.2 T/yr

ACETONE:

(4.18 #/hr) (48 wk/yr X 5 days/wk X 8 hr/day) = 8,026 #/yr = 4.0 T/yr

BOTTOM PAINT & MISC:

(2.28 #/hr) (48 wk/yr X 5 days/wk X 8 hr/day) = 4,378 #/yr = 2.2 T/yr

### POTENTIAL EMISSIONS

STYRENE:

(11.63 #/hr)(48 wk/yr X 5 days/wk X 8 hr/day) = 22,330 #/yr = 11.2 T/yr

METHYL METHACRALATE:

(2.48 #/hr) (48 wk/yr X 5 days/wk X 8 hr/day) = 4,762 #/yr = 2.4 T/yr

MEK:

(0.47 #/hr) (48 wk/yr X 5 days/wk X 8 hr/day) = 902 #/yr = .45 T/yr

1,1,1-TRICHLOROETHANE:

(2.10 #/hr) (48 wk/yr X 5 days/wk X 8 hr/day) = 4,032 #/yr = 2.0 T/yr

ACETONE:

(6.25 #/hr) (48 wk/yr X 5 days/wk X 8 hr/day) = 12,000 #/yr = 6.0 T/yr

BOTTOM PAINT:

(7.02 #/hr) (48 wk/yr X 5 days/wk X 8 hr/day) = 13,478 #/yr = 6.7 T/yr



### State of Florida DEPARTMENT OF ENVIRONMENTAL REGULATION

	For Routing To Other Than The Addressee
To:	Location:
To:	Location;
To:	Location:
From:	Oate:

# Interoffice Memorandum

TO:

Dale Twachtmann

FROM:

Steve Smallwood C

DATE:

December 12, 1989

SUBJ:

Amendments to Construction Permits Nos. AC 05-151435,

AC 05-165270, and AC 05-165271 (Sea Ray Boats, Inc.)

Attached for your approval and signature is a letter extending the expiration dates for the above referenced construction permits.

The Bureau recommends approval of these amendments.

Attachment

SS/JR/plm





## 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

December 12, 1989

### CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. John A. Cronkhite Senior Vice President/General Counsel Sea Ray Boats, Inc. 2600 Sea Ray Boulevard Knoxville, Tennessee 37914

Dear Mr. Cronkhite:

The Department received your request for an extension of the expiration dates for the construction permits referenced below. The request is acceptable and the following shall be changed:

PROJECT	<u>FROM</u>	<u>TO</u>
AC 05-151435	August 31, 1989	May 31, 1990
AC 05-165270	March 31, 1990	September 30, 1990
AC 05-165271	March 31, 1990	September 30, 1990

### Attachment to be Incorporated:

Letter from Sea Ray Boats, Inc. dated November 22, 1989, requesting a change in the expiration dates.

A copy of this letter must be attached to the above construction permits and shall become a part of these permits.

Sincerely,

Dale Twachtmann

Secretary

DT/plm

cc: C. Collins, CF District

G. E. Cantelou, Jr., P.E.

SENDER: Complete items 1 and 2 when additional s 3 and 4.  Put your address in the "RETURN TO" Space on the revers card from being returned to you. The return receipt fee will prove to and the date of delivery. For additional fees the following for fees and check box(es) for additional service(s) request 1.   Show to whom delivered, date, and addressee's additional service(s) request 1.	the side. Failure to do the person delivered by the name of the person delivered services are available. Consult postmaster ed.  dress. 2.   Restricted Delivery (Extra charge)
3. Article Addressed to:	4. Article Number P 938 762 790
Mr. John A. Cronkhite Sr. Vie President/Gen. Counsel Sea Pay Boats, Inc. 2600 Sea Ray Blvd.	Type of Service:  Registered Insured  COD Return Receipt for Merchandise
Knoxville, TN 37914	Always obtain signature of addressee or agent and DATE DELIVERED.
5. Signature Address	8. Addressee's Address (ONLY if requested and fee paid)
6. Signature Agent	
7. Date of Delivery 2 7	2-865 DOMESTIC RETURN RECEI

### F 938 762 790

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED

NOT FOR INTERNATIONAL MAIL

(See Reverse)

Ray ts



November 22, 1989

RECEIVES NOV281989

Mr. Clair Fancy Chief Bureau of Air Regulation Florida Department of Environmental Regulation 2600 Blair Stone Road Tallahassee, Florida 32399-2400

Dear Mr. Fancy:

Please be advised that Sea Ray Boats has experienced unforeseen production reductions due to the recent economic and business cycle. Two plants in Tennessee and another in South Carolina have been closed.

Our facilities in Merritt Island have also been undergoing a restructuring of personnel and new product line.

Due to these recent business adjustments we have been unable to complete the permitting process as required.

Sea Ray Boats hereby requests that your department grant a 180 day extension of our construction permits numbered AC05-165270, AC05-165271 and AC05-151435.

This extension will give us the time needed to complete the process.

Thank you for your assistance in this matter.

Very truly yours,

SEA RAY BOATS, INC.

John A. Cronkhite Senior Vice President/

General Counsel

JAC:lr

CI COULD

							( ) to	
							. 4	
							ي وي ويعمريا	
-co/L	1 - 1 - 1	AIRBIL	L			PACKAGE	ושכוב	02120
	USE THIS AIRBILL FOR COMESTIC SH USE THE INTERNATIONAL AIR WAYBI PUESTIONS? CALL 800-238-5355 TO		NTINENTAL U.S.I IERTO RICO.	). ALASKA ARU HI	AWAI).	TRACKING NUMBER		
1 217	5821200							
13) 3P	Date (		8			RECIPIENT	C CODY	
<b>经是代码是代码是代</b>	11/27/89	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \				NEUIFIENT	S GUT I	
From (Your Name) Please Print		Your Phone Number (V				lame) Please,Print	Recipient's	Phone Number (Very Importan
John A. Cronk		(615+52) Department/Floor No.	<del></del>	Company	81:	r Fancy,	( Dena	itment/Floor No.
T'A RAY BOATS 1				11."	or	ida Dept. of E	nvironn	
Street Address						ress (We Cannot Deliver to P.O. Boxes or		
OO SEA RAY DA			-		00	Blair Stone R	load	
City	State	ZIP Required		City				Required
YOUR BILLING REFERENCE INFORMAT	ION (FIRST 24 CHARACTE	3 7 9	N INVOICE)	]   Ya	110	ahassee, IF HOLD FOR PICK-UP. Print FEDE		2399-246
> 1000 BILLING REFERENCE INFORMAL	ION (FINS) 24 CHANACTE	IS WILL AFFEAN U	n in voice.,			Street Address	A AUUI CAS NOTO	
PAYMENT Bill Sender Bill Recipient's	FedEx Acct. No. Bill 3rd Par	ty FedEx Acct. No.	Bill Credit Ca	ırd		City	tate ZIP R	equired
Cash Cash	5003.05		353	200				
SERVICES	DELIVERY AND SPECIAL	HANDLING PACK	AGES WEIGHT	YOUR DECLARED VALUE	OVER SIZE	Emp. No. Date		Federal Express Use
PRIORITY 1 6 V OVERNIGHT	HOLO FOR PICK-	UP (Fill in Box H)	200	1.11.1.1		Return Shipment	☐ Cho. To Hold	Base Charges
	2 / DELIV	ER WEEKOAY	lest of the			Street Address	- C. G. 101.00	Declared Value Charge
2 COURIER-PAK 7 OVERNIGHT FINVELOPE*	3 DELIVER SATURDAY	(Extra charge)	1.25.		٠,	City State	Zip	Other 1
a C OVERNIGHT	DANGEROUS GOODS  (Extra charge)  5 CONSTANT SURVEILLAN	CE SERVICE (CSS) Tota	i) Total	Total	-	Ony	A	Other 2
° □ BOX	6 ORY ICE	ure Not Applicable)				Received By:		Total Charges
4 OVERNIGHT 9	7 OTHER SPECIAL SERVIC	Rec	eived At 1日Regular S ノ、2日 On-(	lop		Date/Time Received FedEx.Emplo	ovee Number	
	8 🗖		3 □	5 ☐ S.C. Static				PART #111800 REVISION DATE 7/88 PRINTED IN U.S.A. FXEM
C CTANDADD	9 SATURDAY PICK-UP	FEC	DEX Corp. Em	oloyee No.	5	Sender authorizes Federal Express to ment without obtaining a delivery si	gnature and shall,	009
5 STANDARD 10 AIR Delivery not later than	10 <u>                                  </u>		e/Time for FE	DEX Use	77.	indemnify and hold harmless Federal claims resulting therefrom.	Express from any	© 1988 F.E.C.
second business day  *Declared Value Limit \$100."	12 HOLIDAY OFLIVERY (If of		1			Release Signature:		



## 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

FROM: Steve Smallwood

DATE: July 18, 1989

SUBJ: Modification of Permit Number: AC 05-151435

Sea Ray Boats, Inc.

Attached for your approval and signature is a letter modifying the emission factors of Sea Ray Boat's permit for their Sykes Creek boat plant. The new factors more accurately reflect the actual emissions from the facility.

I recommend your approval and signature.

SS/JR/t

attachment





## 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 18, 1989

### CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. John A. Cronkhite Sr. Vice President/General Counsel Sea Ray Boats, Inc. 2600 Sea Ray Blvd. Knoxville, TN 37914

Dear Mr. Cronkhite:

Revised Emission Factors - Sykes Creek Facility (Permit No. AC 05-151435)

The above permit is amended as stated below to reflect the revised emission factors in your letter dated April 28, 1989:

Present Specific Condition No. 4:

Hydrocarbon emissions (VOC) shall not exceed the following calculated values and total VOC emissions from the facility shall not exceed 49.8 lbs/hr, 797 lbs/day (30 day average), and 95.6 tons/year. Compliance shall be demonstrated by applying the following raw material utilization rates and emission factors:

	Utilization	Emission	Emissions
	Rate lbs/hr	Factor	lbs/hr
Styrene	372.5	0.08	29.80
Methyl Methacrylate	49.5	0.08	3.96
MEKP	4.7	0.10	0.47
1,1,1-Trichloroethane	e 3.5	0.66	2.31
Acetone	12.5	0.50	6.25
Bottom Paint	11.7	0.60	7.02

New Specific Condition No. 4:

Hydrocarbon emissions (VOC) shall not exceed the following calculated values and total VOC emissions from the facility shall not exceed 30 lbs/hr, 480 lbs/day (30 day average), Compliance shall be demonstrated by applying the tons/year. following raw material utilization rates and emission factors over a 90-day period.

Mr. John A. Cronkhite Page Two July 18, 1989

	Utilization Rate lbs/hr	Emission Factor	Emissions lbs/hr
Styrene (Resin)	119.5	0.06	7,17
Styrene (Gel Coat)	14.9	0.30	4.46
Methyl Methacrylate	49.5	0.05	2.48
MEKP	4.7	0.10	0.47
1,1,1-Trichloroethane	e 3.5	0.60	2.10
Acetone	6.25	1.00	6.25
Bottom Paint	11.7	0.60	7.02

New Specific Condition No. 4A:

4.A. Nonvolatile acetone substitutes shall be used to the maximum extent practicable to further reduce the quantity of acetone consumed.

New Specific Condition No. 8:

8. By January 31, 1990, Sea Ray Boats shall submit a conceptual plan and potential course of action that will provide the Department with reasonable assurance that objectionable odors and toxic air pollutants in quantities that could exceed acceptable ambient concentrations will not be discharged off of the facility's property boundary or where the public has access, whichever is closest, pursuant to F.A.C. Rules 17-2.200 and 17-2.620(1) and (2). The plan should contain at a minimum, but not be limited to, various control system strategies that might be installed to reduce or eventually eliminate emissions of VOC/OS from each type of operation, associated time and cost analyses, and VOC/OS substitutes.

This amendment letter shall become attachment No. 2 to your construction permit AC 05-151435.

Sincerely,

Dale Twachtmann

Secretary

DT/kt

cc: C. Collins, Central District

G. E. Cantelou, Jr., P.E.

SENDER: Complete items 1 and 2 when additional 3 and 4.  Put your address in the "RETURN TO" Space on the rever card from being returned to you. The return receipt fee will p to and the date of delivery. For additional fees the following for fees and check box(es) for additional service(s) request 1. ☐ Show to whom delivered, date, and addressee's ad (Extra charge)	se side. Failure to do this will prevent this rovide you the name of the person delivered services are available. Consult postmaster ted.
3. Article Addressed to:	4. Article Number
Mr. John A. Cronkhite Sr. Vice Pres./General Counsel Sea Ray Boats, Inc. 2600 Sea Ray Blvd. Knoxville, TN 37914	Type of Service:  Registered Insured  COD Express Mail Return Receipt for Merchandise  Always obtain signature of addressee or agent and DATE DELIVERED.
5. Signature — Address X  6. Signature — Agent X  7. Date of Delivery VIS  PS Form 3811, Mar. 1988 * U.S.G.P.O. 1988-212-	8. Addressee's Address (ONLY if requested and fee paid)

### 538.752 627

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED

NOT FOR INTERNATIONAL MAIL

(See Reverse)

_			- 1							
	Sent to John A. Cronkhite, Sea Boats									
	Street and No. 2600 Sea Ray Blvd.									
	P.O. State and ZIP Code Knoxville, TN 37914									
	Postage	s 								
	Certified Fee									
1	Special Delivery Fee									
	Restricted Delivery Fee									
	Return Receipt showing to whom and Date Delivered									
282	Return Receipt showing to whom, Date, and Address of Delivery									
June	TOTAL Postage and Fees S									
800,	Restmark or Date									
Form 3800, June 1985	Mailed: 7-26-89 Permit: AC 05-151435									



## 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. John A. Cronkhite Senior Vice President/General Counsel Sea Ray Boats, Inc. 2600 Sea Ray Boulevard Knoxville, Tennessee 37914

October 17, 1988

Enclosed is construction permit No. AC 05-151435 to construct a fiberglass boat plant in 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.

Deputy Chief

Bureau of Air Quality Management

Copy furnished to:

C. Collins, CF District

G. E. Cantelou, Jr., P.E.

### CERTIFICATE OF SERVICE

	The	unders	signe	d duly	des	ignated	depi	uty o	clerk h	ereby	
certi	ifies	that	this	NOTICE	OF	PERMIT	and	all	copies	were	mailed
befor	re th	e clos	se of	busine	ss c	on\C	1/18/	88		•	

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.

Judy Rogers

10/18/88

### Final Determination

Sea Ray Boats, Inc.
Merritt Island, Brevard County, Florida

Construction of Fiberglass Boat Plant Permit No. AC 05-151435

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

### 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 Newspaper on September 20, 1988. The Technical Evaluation and Preliminary Determination were available for public inspection at the DER's Central Florida District office in Orlando and the DER Bureau of Air Quality Management 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: Sea Ray Boats, Inc. Sea Ray Drive Merritt Island, FL Permit Number: AC 05-151435 Expiration Date: August 31, 1989

County: Brevard

Latitude/Longitude: 28° 24' 26"N 80° 42' 03"W

Project: Fiberglass Boat Plant

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code (F.A.C.) Rules 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 construction of a facility to produce fiberglass pleasure boats. This project will be located near the Canaveral Port Authority in Merritt Island, Brevard County, Florida. The UTM coordinates of this site are Zone 17, 529.3 km E and 3,142.1 km N.

Construction shall be in accordance with the permit application and plans, documents, and reference material submitted unless otherwise stated in the Preliminary Determination and Technical Evaluation or the General and Specific Conditions herein.

#### Attachments:

1. Application to Operate/Construct Air Pollution Sources, DER Form 17-202(1), received on June 30, 1988.

Permit Number: AC 05-151435 Expiration Date: August 31, 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.

Permit Number: AC 05-151435
Expiration Date: August 31, 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 noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance.

Permit Number: AC 05-151435 Expiration Date: August 31, 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.
- ll. 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 noncompliance 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. This permit also constitutes:
  - ( ) Determination of Best Available Control Technology (BACT)
  - ( ) Determination of Prevention of Significant Deterioration (PSD)
  - ( ) Compliance with New Source Performance Standards
- 14. 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.

Permit Number: AC 05-151435
Expiration Date: August 31, 1989

#### GENERAL CONDITIONS:

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.

- 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.

15. 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 plant shall be allowed to operate for up to 3,840 hours per year.

Permit Number: AC 05-151435 Expiration Date: August 31, 1989

#### SPECIFIC CONDITIONS:

- 3. Visible emissions from the dust collectors shall not be greater than 5% 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. Hydrocarbon emissions (VOC) shall not exceed the following calculated values and total VOC emissions from the facility shall not exceed 49.8 lbs/hr, 797 lbs/day (30 day average), and 95.6 tons/yr. Compliance shall be demonstrated by applying the following raw material utilization rates and emission factors:

	Utilization Rate lbs/hr	Emission Factor	Emissions (lbs/hr)
Styrene	372.5	0.08	29.80
Methyl Methacrylate	49.5	0.08	3.96
MEKP	4.7	0.10	0.47
1,1,1,-Trichloroethane	3.5	0.66	2.31
Acetone	12.5	0.50	6.25
Bottom Paint	11.7	0.60	7.02

- 5. No air pollutants shall be discharged which cause or contribute to an objectionable odor.
- 6. The compliance test shall be conducted within 30 days after operation begins and the results reported to the Department's Central Florida District office before this construction permit expires. The Department shall be notified at least 15 days in advance of the test and at least 5 days prior to the plant being placed in operation.
- 7. An application for a permit to operate shall be submitted to the Department's Central Florida District office at least 60 days prior to the expiration date of this permit or within 45 days of testing, whichever occurs first.

Issued this // day of // 1988

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION

Dale Twachtmann, Secretary



## State of Florida DEPARTMENT OF ENVIRONMENTAL REGULATION

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

# Interoffice Memorandum

TO: Dale Twachtmann

FROM: Steve Smallwood

SUBJ: Approval of Construction Permit No. AC 05-151435

Sea Ray Boats, Inc.

DATE: October 13, 1988

Attached for your approval and signature is a permit prepared by Central Air Permitting for the above mentioned company to construct a fiberglass boat building plant in Merritt Island.

No comments were received during the public notice period.

Day 90, after which this permit will be issued by default, is October 28, 1988.

I recommend your approval and signature.

SS/JR/s

attachments

Please call Clair Francy when signed 8-1344

			,
	and 4.  Put your address in the "RETUR card from being returned to you	N TO" Space on the reve I. The return receipt fee very. For additional fees the (es) for additional service( ate, and addressee's addres	
-	3. Article Addressed to:		4. Article Number
	Mr. John A. Cronkhi Senior Vice Pres./G Sea Ray Boars, Inc. 2600 Sea Ray Blvd.	en. Counsel	P 274 007 475  Type of Service:  Registered Insured  XX Certified COD  Express Mail
	Knoxville, TN 37914		Always obtain signature of addressee or agent and DATE DELIVERED.
	5. Signature — Addressee  6. Signature — Agent  X  7. Date of Delivery	13 (3 68 ) E	8. Addressee's Address (ONLY if requested and fee paid)
i	PS Form 3811, Mar. 1987	+ U.S.G.P.O. 1987-178-268	DOMESTIC RETURN RECEIPT

### P 274 007 475

RECEIPT FOR CERTIFIED MAIL

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

30-794	Sent to Mr. John A. Cronkhi	ite,	Sea	Ray					
985-40	Street and No. Boa 2600 Sea Ray Drive								
≈ U.S.G.P.O. 1985-480-794	P.O. State and ZIP Code Knoxville, TN 37914								
U.S.G.	Postage	S .							
*	Certified Fee								
	Special Delivery Fee								
	Restricted Delivery Fee								
١٥.	Return Receipt showing to whom and Date Delivered								
3 198	Return Receipt showing to whom, Date, and Address of Delivery								
Jun,	TOTAL Postage and Fees								
3800	Postmark or Date								
PS Form 3800, June 1985	Mailed: 10-18-88 Permit: AC 05-151435								
			- 1	,					



September 26, 1988

# 9396418684 VIA FEDERAL EXPRESS RECEIVED

SEP 27 1988

DER - BAQM

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

Application for Permit

Dear Mr. Fancy:

Pursuant to your letter of September 8, 1988 and the instructions therein regarding our Application for Permit to construct a fiberglass boat plant in Merritt Island please find enclosed herewith our proof of publication of the Notice of Intent, which was published in the Florida Today newspaper on September 20, 1988.

Very truly yours,

SEA RAY BOATS, INC.

John A. Cronkhite Senior Vice President/

General Counsel

JAC:cbh

Enclosure John Reynolds copied: Chull Collins, CF Dist.

AIRBILL

USE THIS AIRBILL FOR COMESTIC SHIPMENTS WITHIN THE CONTINENTAL U.S.A.. ALASKA AND HAWAIL

USE THE INTERNATIONAL AIR WAYBILL FOR SHIPMENTS TO PUERTO RICO.

QUESTIONS? CALL 800-238-535 TOLL FREE.

TRACKING NUMBER 5316418584

(Best )			-	,					
968 _ 939g	3418684	,					the second secon	نیا درچمه	5.
<b>经现在的证明的证明的</b>	Date.	Actions where the said	ender ()		THE REAL PROPERTY OF THE		RECIPIENT'S CO	1PY	To the second of
系表形容表形态等形态	9/26/88					· .	IILUIFILITIO	*	S. S
From (Your Name) Please Print		Your Phone Num	ber (Very In	mportant)	, , ,	ent's	Name) Please Print	Recipient's	Phone Number (Very Important)
John A. Cronkh	ire	( )	-1		2	C	H Fance DE	(	· (2)
Company	<u> </u>	Department/Flo	or No.			درر نص	puty Chief	Depar	rtment/Floor No.
JEA RAY BOATS I	NC/CORP OF	FICE			11.		pury Chier <u>of Air Chality Manace</u>	mant.	3. 30
Street Address				- ;	Exact Stre	et Ad	dress (We Cannot Deliver to P.D. Roxes or P.O Zin I	Codes IN	71
.1600 SEA RAY BL	. Wri			*,	Flori	lda	Dept. of Environment	:al'R	egulation
City	State	<b>ZIP</b> Required			<del>2000</del>	Bl	air Stone Rd. Rain To	ZIP	lequired . Dates .
. NOAVILLE	E CA	3 7	<b>5</b> ]	45	Talla	ah <sub>F</sub>	ssee. Florida	323	99-2400
YOUR BILLING REFERENCE INFORMATI	ION (FIRST 24 CHARACTE	RS WILL APPE	AR ON IN	(VOICE.)	<del></del>		IF HOLD FOR PICK-UP, Print FEDEX Addres	_	,
•	1					•	Street Address		
PAYMENT Bill Sender Bill Recipient's	FedEx Acct. No. Bill 3rd Pa	arty FedEx Acct. No.		Bill Credit Ca	ard		City State	ZIP Re	equired
Cash Cash	STATE OF THE PROPERTY OF THE P	WE THE	4435	C. STATE	MARCH.	2	1.4		
SERVICES	DELIVERY AND SPECIA	· UA MOLINO	PACKAGES	WEIGHT	YDUR DECLARED	OVER	Emp. No. Date	<u> </u>	Federal Express Use
SERVICES	. DELITENT AND SPECIA	L HARVLING			VALUE	SIZE	☐ Cash Received		Base Charges
1 PRIORITY I 6 P OVERNIGHT LETTER*	1 HOLO FOR PICK-	-UP (Fill in Box H)		1,39			☐ Return Shipment ☐ Third Party ☐ Chg. To Det. ☐ Ch	g. To Hold	
Overnight Delivery		VER WEEKDAY	,				Street Address	g. To noid	Declared Value Charge
2 COURIER-PAK 7	3 DELIVER SATURDAY			Calcard					Other 1
OVERNIGHT CONTRACTOR C	4 DANGEROUS GOODS			1 1 2			City	Zip	
3 DOVERNIGHT 8	5 CONSTANT SURVEILLAI [Extra charge) (Release Signi	NCE SERVICE (CSS)	Total	Total	Total	-			Other 2
° LJ BOX ° LJ	6 DRY ICE	Mure Not Applicable;					Received By:		Total Charges
4 OVERNIGHT 9	7 TOTHER SPECIAL SERVIN	CI TO THE STATE OF	Received	Regular St	top		X ·		(Oldi Citatges
4 LJ TÜBE	8 T		30	2 □ On-C	all Stop · 5 □		Date/Time Received FedEx Employee Num	ber	PART #111800
	SATURDAY PICK-UP		Drop Bo		S.C. Static	on	Sandar authorizon Endoral Everage to deliver the	-i- abio	REVISION DATE 1/88 PRINTED IN U.S.A. GBFE
	(Extra charge)		FEDEX	Corp. Emp	oloyee No.	5	Sender authorizes Federal Express to deliver to ment without obtaining a delivery signature a	ind shall	009
5 STANDARD 10 1	10 🔲		7	7/	4,		indemnity and hold harmless Federal Express t claims resulting therefrom.	rom any	© 1988 F.E.C.
not later than second business day	11		Date/Tin	me for FEC	DEX Use		Release / /	54	9 1988 F.E.C.
*Declared Value Limit \$100.	12 HOLIDAY DELIVERY (11 o	rffered)	,	$\mathcal{F}(\mathcal{F})$	1. 1	<b>'</b> '	Signature	,	-

## CAPE PUBLICATIONS, INC.

### The Times

Published Weekly on Wednesday

### 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; that the attached copy of advertising being a  Notice of Intent
permit to Sea Ray Boats, Inc.
in the Court
was published in the FLORIDA TODAY NEWSPAPER
in the issues ofSeptember 20, 1988
Affiant further says that the said
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.
Sworn and subscribed to before me this  20th  88

ST\R-ADVOCATE

Published Weekly on Wednesday

State of Fiorida
Department of
Environmental Regulation
Notice of Intent
The Department of Environmental. Regulation hereby gives
notice of its intent to issue a permils to Sea Ray Boats, Inc. to
construct a fiberglass boat building plant at their facility in Merritt Island, Florida. The Department is issuins this intent to Issue
for the reasons stated in the
Technical Evaluation and Preliminary Determination.
Persons whose substantial interests are affected by the Deparlment's proposed permitting
decision may petition for an administrative determination (hearing) in accordance with
Section 120.57, Florida Statutes.
The petition must conform to the
requirements of Chapters 17-103
and 28-5, Florida Administrative
Code, and must be filed (received) in the Department's Office of General Counsel, 2600
Blair Stone Road, Twin Towers
Office Building, Tallahassee,
Florida 32399-2400, within fourteen (14) days of publication of
fhis notice. Failure to file a petition within this time period constitutes a waiver of any right such
person has to request an administrative determination (hearing)
under Section 120.57, Florida
Statutes.

If a petition is filed, the administrative determination (hearing)
under Section 120.57, Florida
Statutes.

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 proposed agency action. Therefore, persons
who may not wish to file a petition
may wish to intervene in the proceeding. A petition for intervention may be filed pursuant to
Rule 28-5,07, Florida Administrative Code, at least five (5)
days before the final hearing and
be filed with the hearing officer it
one has been assigned at the Division of Administrative Hearings, Department of Administratrative Code, at least five (5)
days before the final hearing and
be filed with the hearing officer it
one has been assigned at the Division of Administrative Hearings, Departmen

Dept. of Environmental Regulation
Central Florida 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 Departent's final determination.
1094028—11—9/20, 1988,

September <u>....</u> A.D., 19

U) 6

Notary Public, Florida, State at unite My Commission Expires May 27 1129 £16.



p M 9-16-88 Augusta, GA file copy

RECEIVED

DER-BAQIVI

September 16, 1988

Mr. Bill Thomas
Bureau of Air Quality Management
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, FL 32399-2400

RE: Permit #AC 05-151435 Sea Ray Boats, Inc. Merritt Island, FL

Dear Mr. Thomas:

Please be advised that since this facility will not be operating at full capacity until after the end of the first year, this facility will be unable to comply with the specific conditions of the referenced permit.

We are requesting that we be allowed to submit, according to EPA Method 24, emissions rates using Material Safety Data Sheets and Usage Logs such as the one attached.

If you have any questions or care to discuss, please call at (803) 648-9300.

Yours

. Cantelow, Jr. P. E

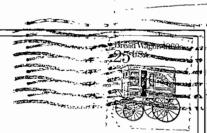
GEC:sc

Attachment

Q. Reynolds C. Collins, CF Wist EHF 13T







Mr. Bill Thomas
Bureau of Air Quality Management
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, FL 32399-2400

## USAGE LOG

WEEV	EMPINIO.		

MONDAY		(1)	(2)	(3)	(4)	(5)	(6)
DESCRIPTION		DENSITY	VOC FACTOR	TIME FACTOR	AMOUNTS USEO	TOTAL VOC EMISSIONS (5) = (1)X(2)X(4)/2000	HOURLY VOC EMISSIONS (6) = (1)X(2)X(4)/(3)
PRODUCT	COMPONENT	#/GAL	X BY WT	HRS/DAY	(GALS)	(TONS)	(#/HR)
RESIN	STYRENE	9.15	8	16			
GEL COAT	STYRENE	10.7	8	16		_	
	METHYL METHACRALATE	10,7	8	16			
MEKP	MEKP	8.0	10	16			
ADHESIVE	1,1,1-TRICHLORETHANE	· 10.5 ·	66	16			
ACETONE	ACETONE	6,1	50	16			
BOTTOM PAINT	BOTTOM PAINT	11,4	60	16			

#### TOTAL DAILY EMISSIONS \_\_\_

TUESDAY		(1)	(2)	(3)	(4)	(5)	(6)
DESCRIPTION		OENSITY	VOC FACTOR	TIME FACTOR	AMOUNTS USE0	TOTAL VOC EMISSIONS (5) = (1)X(2)X(4)/2000	HOURLY VOC EMISSIONS $(6) = (1)X(2)X(4)/(3)$
PRODUCT	COMPONENT	#/GAL	% BY WI	HRS/DAY	(GALS)	(TONS)	(∦/HR)
RESIN	STYRENE	9.15	8	16			
AE	STYRENE	10.7	8	16			
GEL COAT	METHYL METHACRALATE	10.7	8	16			
MEKP	MEXP	8.0	10	16			
ADHESIVE	1,1,1-TRICHLORETHANE	10.5	66	16		•	
ACETONE	ACETONE	6.1	50	16			
BOTTOM PAINT	BOTTOM PAINT	11.4	60	16			

#### TOTAL DAILY EMISSIONS \_

WEDNESDAY		(1)	(2)	(3)	(4)	(5)	(6)
DESCRIPTION		OENSITY	VOC FACTOR	TIME FACTOR	AMOUNTS USED	TOTAL VOC EMISSIONS (5) = (1)X(2)X(4)/2000	HOURLY VOC EMISSIONS $(6) = (1)X(2)X(4)/(3)$
PRODUCT	COMPONENT	#/GAL	X BY WT	HRS/DAY	(GALS)	(TONS)	(#/HR)
RESIN	STYRENE	9.15	8	16			
GEL COAT	STYRENE	10.7	8	16			
GEL COM	METHYL METHACRALATE	10.7	8	16			
MEKP · ·	MEKP	8.0	10	16			
ADHESIVE	1,1,1-TRICHLORETHANE	10.5	66	16			
ACETONE	ACETONE	6.1	50	16			
BOTTOM PAINT	- BOTTOM PAINT	11,4	60	16			•

#### TOTAL DAILY EMISSIONS \_\_\_\_\_

THURSDAY		(1)	(2)	(3)	(4)	(5)	(6)
DESCRIPTION		OENSITY	VOC FACTOR	TIME FACTOR	AMOUNTS USED	TOTAL VOC EMISSIONS (5) = (1)X(2)X(4)/2000	HOURLY VOC EMISSIONS $(6) = (1)X(2)X(4)/(3)$
PRODUCT	COMPONENT	#/GAL	% BY WI	HRS/DAY	(GALS)	(TONS)	(#/HR)
RESIN	STYRENE	9.15	8	16			
GEL COAT	STYRENE	10.7	8	16			
Oct. COM	METHYL METHACRALATE	10.7	8	16			
MEKP	MEKP	8.0	10	16			_ •
ADHESIVE	1,1,1-TRICHLORETHANE	10.5	66	16			
ACETONE	ACETONE	6.1	50	16			
BOTTOM PAINT	BOTTOM PAINT	11.4	60	16			

## TOTAL DAILY EMISSIONS

FRIDAY		(1)	(2)	(3)	(4)	(5)	(6)
DESCRIPTION	·	DENSITY	VOC FACTOR	TIME FACTOR	AMOUNTS USED	TOTAL VOC EMISSIONS (5) = (1)X(2)X(4)/2000	HOURLY VOC EMISSIONS (6) = (1)X(2)X(4)/(3)
PRODUCT	COMPONENT	#/GAL	% BY WT	HRS/DAY	(GALS)	(TONS)	(#/HR)
RESIN	STYRENE	9.15	8	16	•	•	
GEL COAT	STYRENE	10.7	8	16			
GEL COAT	METHYL METHACRALATE	10.7	8	16			
MEKP	MEKP	8.0	10	16			
ADHESIVE .	1,1,1-TRICHLORETHANE	10.5	66	16			
ACETONE	ACETONE	6,1	50	16			
BOTTOM PAINT	UOTTOM PAINT	11.4	60	10			

TOTAL DAILY EMISSIONS \_\_\_\_\_

TOTAL WEEKLY EMISSIONS \_\_\_



# 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 8, 1988

CERTIFIED MAIL-RETURN RECEIPT REQUESTED

Mr. John A. Cronkhite Senior Vice President/General Counsel Sea Ray Boats, Inc. 2600 Sea Ray Boulevard Knoxville, Tennessee 37914

Dear Mr. Cronkhite:

Attached is one copy of the Technical Evaluation and Preliminary Determination and proposed permit for construction of a fiberglass boat plant at your Merritt Island facility.

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/s

Attachments

cc: C. Collins, CF District

G. E. Cantelou, Jr., P.E.

# BEFORE THE STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION

In the Matter of Application for Permit by:

Sea Ray Boats, Inc. Sea Ray Drive Merritt Island, Florida DER File No. AC 05-151435

## 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, Sea Ray Boats, Inc., applied on June 30, 1988, to the Department of Environmental Regulation for a permit to construct a fiberglass boat facility in Merritt Island, 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 was needed for the proposed work.

Pursuant to Section 403.815, F.S. and DER Rule 17-103.150, FAC, you (the applicant) are required to publish at your own expense the enclosed Notice of Proposed Agency Action on permit applications. The notice must be published one time only in a section of a major local newspaper of general circulation in the county in which the project is located and within thirty (30) days from receipt of this intent. Proof of publication must be provided to the Department within seven days of publication of the notice. 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. Petitions must comply with the requirements of Florida Administrative Code Rules 17-103.155 and 28-5.201 (copy enclosed) and be filed with (received by) the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. Petitions filed by the permit applicant must be filed within fourteen (14) days of receipt of this intent. Petitions filed by other persons must be filed within fourteen (14) days of publication of the public notice or within fourteen (14) days of receipt of this intent, whichever first occurs. 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, concerning the subject permit application. Petitions which are not filed in accordance with the above provisions will be dismissed.

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, CF District

G. E. Cantelou, Jr., P.E.

# RULES OF THE ADMINISTRATIVE COMMISSION MODEL RULES OF PROCEDURE CHAPTER 28-5 DECISIONS DETERMINING SUBSTANTIAL INTERESTS

### 28-5.15 Requests for Formal and Informal Proceedings

- (1) Requests for proceedings shall be made by petition to the agency involved. Each petition shall be printed, typewritten or otherwise duplicated in legible form on white paper of standard legal size. Unless printed, the impression shall be on one side of the paper only and lines shall be double spaced and indented.
- (2) All petitions filed under these rules should contain:
  - (a) The name and address of each agency affected and each agency's file or identification number, if known;
  - (b) The name and address of the petitioner or petitioners;
  - (c) All disputed issues of material fact. If there are none, the petition must so indicate;
  - (d) A concise statement of the ultimate facts alleged, and the rules, regulations and constitutional provisions which entitle the petitioner to relief;
  - (e) A statement summarizing any informal action taken to resolve the issues, and the results of that action;
  - (f) A demand for the relief to which the petitioner deems himself entitled; and
  - (g) Such other information which the petitioner contends is material.

## CERTIFICATE OF SERVICE

	The '	under	signe	d duly	desi	ignated	deg	outy c	lerk	here	eby	
certi	ifies	that	this	NOTICE	OF	INTENT	то	ISSUE	and	all	copies	were
maile	ed be	fore t	the cl	lose of	bus	siness o	on	9-	9-8	8		

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.

Clerk Coges

9-9-88 Date

# State of Florida Department of Environmental Regulation Notice of Intent

The Department of Environmental Regulation hereby gives notice of its intent to issue a permit to Sea Ray Boats, Inc. to construct a fiberglass boat building plant at their facility in Merritt Island, Florida. The Department is issuing this Intent to Issue for the reasons stated in the Technical Evaluation and Preliminary Determination.

Persons whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative determination (hearing) in accordance with Section 120.57, Florida Statutes. The petition must conform to the requirements of Chapters 17-103 and 28-5, Florida Administrative Code, and must be filed (received) in the Department's Office of General Counsel, 2600 Blair Stone Road, Twin Towers Office Building, Tallahassee, Florida 32399-2400, within fourteen (14) days of publication of this notice. Failure to file a petition within this time period constitutes a waiver of any right such person has to request an administrative determination (hearing) under Section 120.57, Florida Statutes.

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 proposed agency action. Therefore, persons who may not wish to file a petition may wish to intervene in the proceeding. A petition for intervention must be filed pursuant to Rule 28-5.207, Florida Administrative Code, at least five (5) days before the final hearing and be filed with the hearing officer if one has been assigned at the Division of Administrative Hearings, Department of Administration, 2009 Apalachee Parkway, Tallahassee, Florida If no hearing officer has been assigned, the petition is to be filed with the Department's Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. Failure to petition to intervene within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, Florida Statutes.

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:

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

Dept. of Environmental Regulation Central Florida 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

Sea Ray Boats, Inc.
Brevard County
Merritt Island, Florida

Fiberglass Boat Plant Permit No. AC 05-151435

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

## I. Application Information

### A. Applicant

Sea Ray Boats, Inc. Sea Ray Drive Merritt Island, Florida

#### B. Request

The Department received an application on June 30, 1988, for a permit to construct a fiberglass boat plant at the applicant's site in Merrit Island, Florida. The application was deemed complete on July 29, 1988.

#### C. Location/Classification

The applicant's boat manufacturing facility (SIC Code 3732) is located off State Road 3 near the Canaveral Port Authority in Merritt Island. Latitude and longitude are 28°24'26" N and 80°42'03" W, respectively. The UTM coordinates of the site are: Zone 17, 529.3 km E and 3,142.1 km N.

## II. Project Description/Emissions

Fiberglass pleasure boats will be manufactured using an airless mold injection method. Laminations of resin and fiberglass are applied over gel coat before the wooden and foam structural parts are installed. After lamination the boats are extracted from their molds and trimmed of excess material. Upholstered parts are then prepared and used in the final assembly along with parts manufactured elsewhere.

Fiberglass boat manufacturing generates particulate emissions (sawdust from wood working and fiberglass from grinding) as well hydrocarbon (VOC) emissions from the molding operation. The applicant proposes using a high efficiency dust collection system to collect and recover essentially all of the particulate emissions. The VOC emissions, which total less than 100 TPY and are impractical to collect and treat, will be vented from the lamination building by exhaust fans.

#### III. Rule Applicability

The construction permit application is subject to review under Chapter 403, Florida Statutes, and Florida Administrative Code (FAC) Rules 17-2 and 17-4. The proposed facility is to be located in an area classified as attainment for regulated air pollutants. Since the proposed facility is classified as minor, it is not subject to the new source review requirements of Rule 17-2.500. Applicable rules are (1) FAC Rule 17-2.520, Sources Not Subject to Prevention of Significant Deterioration or Nonattainment Requirements; (2) FAC Rule 17-2.610, General

Particulate Emission Limiting Standards; and (3) General Pollutant Emission Limiting Standards.

## IV. Conclusion

Ŗ

The permit application should be approved.



## 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: Sea Ray Boats, Inc. Sea Ray Drive Merritt Island, FL

Permit Number: AC 05-151435 Expiration Date: August 31, 1989

County: Brevard

28° 24' 26"N 80° 42' 03"W Latitude/Longitude:

Project: Fiberglass Boat Plant

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code (FAC) Rules 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 construction of a facility to produce fiberglass pleasure This project will be located near the Canaveral Port Authority in Merritt Island, Brevard County, Florida. The UTM coordinates of this site are Zone 17, 529.3 km E and 3,142.1 km

Construction shall be in accordance with the permit application and plans, documents, and reference material submitted unless otherwise stated in the Preliminary Determination and Technical Evaluation or the General and Specific Conditions herein.

#### Attachments:

1. Application to Operate/Construct Air Pollution Sources, DER Form 17-202(1), received on June 30, 1988.

PERMITTEE: Permit Number: AC 05-151435
Sea Ray Boats, Inc. Expiration Date: August 31, 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.

Permit Number: AC 05-151435 Expiration Date: August 31, 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;
  - 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 noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance.

Permit Number: AC 05-151435 Expiration Date: August 31, 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 noncompliance 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. This permit also constitutes:
  - ( ) Determination of Best Available Control Technology (BACT)
  - ( ) Determination of Prevention of Significant Deterioration (PSD)
  - ( ) Compliance with New Source Performance Standards
- 14. 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.

Permit Number: AC 05-151435 Expiration Date: August 31, 1989

#### **GENERAL CONDITIONS:**

- 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.
- 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.
- 15. 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 plant shall be allowed to operate for up to 3,840 hours per year.

Permit Number: AC 05-151435 Expiration Date: August 31, 1989

#### SPECIFIC CONDITIONS:

- 3. Visible emissions from the dust collectors shall not be greater than 5% opacity and compliance shall be demonstrated at 90-100% of permitted capacity using DER Method 9 in accordance with FAC Rule 17-2.700.
- 4. Hydrocarbon emissions (VOC) shall not exceed the following calculated values and total VOC emissions from the facility shall not exceed 49.8 lbs/hr, 797 lbs/day (30 day average), and 95.6 tons/yr. Compliance shall be demonstrated by applying the following raw material utilization rates and emission factors:

	Utilization Rate lbs/hr	Emission Factor	Emissions (lbs/hr)
Styrene	372.5	0.08	29.80
Methyl Methacrylate	49.5	0.08	3.96
MEKP	4.7	0.10	0.47
l,l,l,-Trichloroethane	3.5	0.66	2.31
Acetone	12.5	0.50	6.25
Bottom Paint	11.7	0.60	7.02

- 5. No air pollutants shall be discharged which cause or contribute to an objectionable odor.
- 6. The compliance test shall be conducted within 30 days after operation begins and the results reported to the Department before this construction permit expires. The Department shall be notified at least 15 days in advance of the test and at least 5 days prior to the plant being placed in operation.
- 7. An application for a permit to operate shall be submitted to the Department's Central Florida District office at least 60 days prior to the expiration date of this permit or within 45 days of testing, whichever occurs first.

Issued	this	day of	, 1988
ISSucu	CITTO	ady or	, 1000

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION

Dale Twachtmann, Secretary

Page 6 of 6

ATTACHMENT 1

Available Upon Request.

## P 274 007 448

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED

NOT FOR INTERNATIONAL MAIL

(See Reverse)

± U.S.G.P.O. 1985-480-794	Sent to Mr. John A. Cronkhi	te,	Sea	Ray
985-48	Street and No. 2600 Sea Ray Blvd.		Воа	ts :
0.0	P.O. State and ZIP Code Knoxville, TN 37914	<del> </del>		. ;
I.S.G.I	Postage	\$		
1 #	Certified Fee			
	Special Delivery Fee			
	Restricted Delivery Fee			
	Return Receipt showing to whom and Date Delivered	_		
1985	Return Receipt showing to whom, Date, and Address of Delivery			]
June	TOTAL Postage and Fees	\$		
800,	Postmark or Date			
S Form 3800, June 1985	Mailed 9-9-88 Pemrit: AC 05-1514	35		

* U.S.G.P.O. 1987-178-2	<u></u>
7. Date of Delivery	
x	
6. Signature – Agent	
5. Signature - Addressee  X  Sortial (0)	8. Addressee's Address (ONLY if requested and fee paid)
	Always obtain signature of addressee or agent and <u>DATE DELIVERED</u> .
Knoxville, TN 37914	Express Mail
2600 Sea Ray Blvd.	☐ COD ☐ COD
Sea Ray Boats, Inc.	☐ Registered ☐ Insured
Senior VP/General Counsel	Type of Service:
Mr. John A. Cronkhite	P 274 007 448
3. Article Addressed to:	4. Article Number
postmaster for fees and check box(es) for additional services. XX Show to whom delivered, date, end addressee's ad \$\(\(\text{(Extra charge)}\)\)\$	ice(s) requested.
Put your address in the "RETURN TO" Space on the card from being returned to you. The return receipt delivered to and the date of delivery. For additional fe	fee will provide you the name of the person
SENDER: Complete items 1 and 2 when addition and 4.	· · ·

P 274	007	449
-------	-----	-----

## RECEIPT FOR CERTIFIED MAIL

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

x U.S.G.P.O. 1985-480-794	Sent to G. E. Cantelou, P.J Street and No. P.O. Box 2102 P.O. State and ZIP Code Aiken, SC 29802	Ξ <u>.,</u>	Canto	i i
U.S.G.	Postage	s		
<b>*</b>	Certified Fee			
	Special Delivery Fee			
·	Restricted Delivery Fee			
2	Return Receipt showing to whom and Date Delivered			
e 198	Return Receipt showing to whom, Date, and Address of Delivery			
3800, June 1985	TOTAL Postage and Fees	\$		
າ 3800	Postmark or Date			

Permit: AC 05-151435

PS Form 3800, June 1985

SENDER: Complete items 1 and 2 when additional s and 4.  Put your address in the "RETURN TO" Space on the reversal from being returned to you. The return receipt feed delivered to and the date of delivery. For edditional fees to postmaster for fees and check box(es) for additional service 1.XX Show to whom delivered, date, and addressee's address to the control of	orse side. Failure to do this will prevant this will provide you the name of the person the following services are available. Consult (s) requested.
3. Article Addressed to:	4. Article Number
G. E. Cantelou, Jr., P.E. Cantelou Associates, Inc. Post Office Box 2102 Aiken, South Carolina 29802	P 274 007 449  Type of Service:  ☐ Registered ☐ Insured  ☐ COD ☐ Express Mail
	Always obtain signature of addressee or agent and DATE DELIVERED.
5. Signature – Addressee X	8. Addressee's Address (ONLY if requested and fee paid)
6. Signature - Agent  Branda Cantelou  7. Date of Delivery	
9-13-80	
PS Form 3811 Mar. 1987 + US G PO. 1987-178-268	DOMESTIC DETUDN DECEIDT

## APPLICATION TRACKING SYSTEM

							_		- 1							2110	-										
Ā	PP	L 3	NO:	15	14	35																					
	AP	PL	RE	CV	D =	06/	30/	88		TYP	E C	001	E: A	C	SUB	COD	E: 0	15				L	AST	UP	DAT	E:06	/30/8
	DE	P .	OFF	TC	E	REI	VD-	OR		DER	OF	FI	CE.	TRA	NSE	FR	To-	BAG	) a	PPI	TCA	TIO	N C	OMP	FT	F:	/30/8 //_
	DE		000	FF	50	AP.	J	LILD	ME	2	•	• • •												•			
												0 1			- 10				118.5		1-1			ccu		CENE	0443
	AP	rL.	21	AI	03	THE	. 01															EMP	1 / 1.	330	EUI	GENE	RAL)
									REI	LIE	F	_ ¹	(55)	AC/	EXE	MPT	ION	15/V	ARI	ANC	E)						
	CY.	/ N	) 1	i M	AN	UAL	TS	CAC	KI	NG										D	IST	RIC	1:3	0 0	OUN	TY:O	5 •42•0
	CY.	IN	) 1	D	NR	RE	VIE	W	RE	20?										L	AT/	LON	6:2	8.2	4.2	6/80	.42.0
	CY	/ N	) 1	P	UB	LIC	NO	IT	CE	RE	002									В	AST	N-SI	EQM	ENT	=		
	EY	IN	3 8	, G	DM	B f	DY	1.0	CAL	A1	PPP	OWI	14	PED	0.2					r	DE	# -					
	f W	F NI	· ·		ET	TE	0.5		NT	ENT	DE	001	, .	/ T	110	SHE	20	DEN	¥ 3	Α.	Te						
			, ,	-		121	. 01			_14 1	N.E.	us.	_	. 1	, 13	305	01	DEN	10								
								200	-																		
	PR	3.5	ECT	S	90																					1000	
						3	TRE	ET	: \$1	EA I	RAY	Di	RIV	E						CI	TY:	MER	RIT	I	SLA	N D	
							STA	TE	: F1	L		Z	IP:				P	HON	E:			-					
		A	PPL	IC	AT	ION	NA	ME	: 0/	ANT	ELO	U A	455	OCI	ATE	S.	INC			300.00							
						5	TRE	FT	- P (	OST	OF	FIG	CF F	BOX	31	02	200000			CI	TY:	AIK	EN				
						-	STA	TE	- 51		-	71	P-	208	02		0	HON	E - 8	n 3	548	-03	30				
					ar	CNT	NI	ME	1					- 70	52		-	HON		.00	040	, , ,	34				
					HU	CHI	TOP	CINE													==						
						3	IKE	21	₹											CI	IT:						-1-
							STA	TE	:	_		2.1	LP:				P	HON	E:_							304	
	FEI	E	#1	DA	TE	PA	ID:	06	/30	0/8	8	At	1001	NT	PAI	D=G	075	0	RE	CEI	PT	NUME	BER:	:00	124	304	
В	D	AT	E A	PP	LI	CAN	IT I	NF	ORE	MED	OF	NE	EED	FO	RP	UBL	IC	NOT	ICE	-	-		1	1	_		
-	-	-			-		( in the	100							100		-	man min								/	1
0	D	T	F n	FR	R	EQ.	CC	MM	ENT	rs I	FRO	M C	SOV.	. 8	ORY	FO	PI	OFA	t 4	PP.			1	1			
_	0	. T		4	A P	RIT	TON		7.0	UED	DE	0	DE		DOM	6.0	DI T	CAN	- "				,-	-,-		,	1
_	0.		E #	1	20	DAI	TON	IML	-	NEO	NE.		RE		ROM	AF	PLI	CAN	-		-		· , · · ·		-		
	Di	9 1 1	E #	2	AD	DII	TON	IAL	21	VPU	KE	W	KE		RUM	AP	PLI	LAN	-		_	_		_"		'	
E	Di	AII	E #	3	AD	DII	100	IAL	17	OH	RE	Q	-KE	-	ROM	AP	PLI	CAN	1		-		."	_/_			/
E	Di	ATI	E #	4	AD	DIT	ION	IAL	I	NEO	RE	3	RE	F	ROM	AP	PLI	CAN	Ŧ				/	1		/_	/
E	Di	ATI	E #	5	AD	DIT	ION	IAL	I	VFO	RE	Q	RE	CF	ROM	AP	PLI	CAN	T		-		/	1_		/	/
E	Di	TA	E #	6	AD	DIT	ION	AL	I	NFO	RE	Q	RE	CF	ROM	AP	PLI	CAN	T		_	_	1	1		1	1
F	DI	IT	E G	ov	ER	NIN	IG B	100	Y 5	REGI	UES	TED	51	URV	EY	RES	ULT	SIR	EPO	RTS	_		1	1			
G	D	T	FF	IF	I D	RE	POR	T	465	S RE	- 0-	-RF	۲.		_				_		-	-	1	1		1	1
ŭ	Di	T	- n	NIP		ENT	EU	LI A	2 /	OME	21 6	TER		_	_		_		_		_	_	1	-;-		'	
	01			1414	PK.			m /*.	3 1	COM	-		•										*		-		/
L	DI	411	t A	PP	LI	LAI	100	i W.	A.S	COL	TPL	EIE			_		_		<u> </u>		_		·	_/_	_		
J	DI	AT	E G	OV	ER	NIN	IG B	00	A E	2 R O 1	VID	ED	COL	MME	NTS	OR	0.8	JEC.	TIO	NS	-		1_	1_	_		
K	DI	IT	E N	OT	IC	E 0	FI	NT	ENT	W	15	SEN	IT	RE	CT	OA	PPL	ICA	NT		-		1	1		_/_	1
L	DI	IT	E P	UB	LI	C N	OTI	CE	60	15 5	SEN	ΤТ	0 /	APP	LIC	ANT	-		-		_		1	1			
																OTI		REC	FIV	FD	-		1	1	-		
							EGI								-		_				_	_	1	1		,	1
-	-	12																									
_						00				1	- 1	Vi	-	2													
	umi	1tl	NTS	-	1	1	34.7 3	7 0	MI	end	fo			OE.													
					6.		n		1	0	V	1	11														
					2	. <	mes	mer	l	1		(	1														
					2	0	ens o Ques	Cox	7	rica	WHE !		-														
					-	-		()	0				X														
								4					0														

STATE OF FLORIDA  DEPARTMENT OF ENVIRONMENTAL REGULATION NO. 124304  RECEIPT FOR APPLICATION FEES AND MISCELLANEOUS REVENUE
Applicant Name & Address
Revenue Code OCIC 51 UK 5549 Application Number ACOS 151435

٠,

#### STATE OF FLORIDA

## DEPARTMENT OF ENVIRONMENTAL REGULATION . .

CENTRAL FLORIDA DISTRICT
3319 MAGGINES BOULEVARD
DILLANDO FLORIDA 32803-3787





BOB MARTINEZ GOVERNOR DALE TWACHTMANN SECRETARY ALEX ALEXANDER DISTRICT MANAGER

9 30M > 0 1300 M	APPLICATION TO OPERATE/CONSTRUCT AIR POLLETION	SOURCES TIVED
CENTRAL FLORIDA SOURCE DISTRICT Fib	APPLICATION TO OPERATE/CONSTRUCT AIR POLLETION erglass Boat Plant [X] New [] Exi	seing UEIVL
APPLICATION TYPE:	[X] Construction [] Operation [] Modifica	tion JUL 6 1900
		- COUNTY DERBEAGNE
Identify the speci	fic emission point source(s) addressed in this	application (i.e. Lime
Kiln No. 4 with Ve	nturi Scrubber; Peaking Unit No. 2, Gas Fired)	
SOURCE LOCATION:	Street Sea Ray Drive	Building _ <sup>City</sup> <u>Merritt Island</u>
	UTM: East Zone 17 - 529,300 E North	3.142.100 N
·	Latitude 28° 24' 26"N Longit	ude <u>80° 42' 03</u> ''W
APPLICANT NAME AND	TITLE: Cantelou Associates, Inc.	
APPLICANT ADDRESS:	P. O. Box 3102, Aiken, S. C., 29802	· 

#### A. APPLICANT

I am the undersigned owner or authorized representative\* of Sea Ray Boats, Inc.

SECTION I: STATEMENTS BY APPLICANT AND ENGINEER

Sykes Creek Plant I certify that the statements made in this application for a Boat Manuf.Plant 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 contro facilities in such a manner as to comply with the provision of Chapter 403, Florid Statutes, and all the rules and regulations of the department and revisions thereof. also understand that a permit, if granted by the department, will be non-transferabl and I will promptly notify the department upon sale or legal transfer of the permitte establishment.

\*Attach letter of authorization .

Signed:

. Z. Cantelou, Jr. P.E.

Name and Title (Please Type)

Date: 6-28-88 Telephone No. 803-648-9300

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 hav 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

 $^{
m l}$  See Florida Administrative Code Rule 17-2.100(57) and (104)

DER Form 17-1.202(1) Effective October 31, 1982

an effluent that complies wit rules and regulations of the furnish, if authorized by the	ies, when properly maintained and operated, will dischargh all applicable statutes of the State of Florida and the department. It is also agreed that the undersigned will owner, the applicant a set of instructions for the properthe pollution confroi facilities and, if applicable,
	Signed ## #################################
	Ø. Æ. Cantelou. Jr. P. E.
	Name (Please Type)
	Cantelou Associates, Inc.
	Company Name (Please Type)
	P. O. Box 3102, Aiken, S. C. 29802
	Mailing Address (Please Type)
orida Registration No. 18006	Date: June 28,1988   Telephone No. 803/648-9300
SECTION	II: GENERAL PROJECT INFORMATION
and expected improvements in	t of the project. Refer to pollution control equipment, source performance as a result of installation. State lt in full compliance. Attach additional sheet if
The proposed facility	will produce fiberglass pleasure boats. The
	described in detail under Section V:
	- described in detail under Section v.
Supplemental Requireme	ents Article 7.
Schedule of project covered in	n this application (Construction Permit Application Only)
Start of Construction <u>August</u>	t 1 1988 Completion of Construction March 30 1989
for individual components/unit	stem(s): (Note: Show breakdown of estimated costs only ts of the project serving pollution control purposes.  The project serving pollution for operation to the serving polication for
Dust Collection	n System - \$120,000 (approximately)
· · · · · · · · · · · · · · · · · · ·	
<del></del>	
	•
Indicate any previous DER perm point, including permit issuar	mits, orders and notices associated with the emission nce and expiration dates.
Permit	Number 051322579
2322	
Form 17-1 202(1)	

Ε.	Requested permitted equipment operating time: hrs/day_16; days/wk_5	; wks/yr <u>48</u>
	if power plant, hrs/yr; if seasonal, describe: Does Not Apply	
F.	If this is a new source or major modification, answer the following quest (Yes or No)	ions.
	1. Is this source in a non-attainment area for a particular pollutant?	No
٠	a. If yes, has "offset" been applied?	
	b. If yes, has "Lowest Achievable Emission Rate" been applied?	
	c. If yes, list non-attainment pollutants.	
	<ol> <li>Does best available control technology (BACT) apply to this source?</li> <li>If yes, see Section VI.</li> </ol>	No
	J. Does the State "Prevention of Significant Deterioristion" (PSD) requirement apply to this source? If yes, see Sections VI and VII.	No
	4. Do "Standards of Performance for New Stationary Sources" (NSPS) apply to this source?	No.
	5. Do "National Emission Standards for Hazardous Air Pollutants" (NESHAP) apply to this source?	No
1	Do "Reasonably Available Control Technology" (RACT) requirements apply to this source?	No
-	a. If yes, for what pollutants?	A
	b. If yes, in addition to the information required in this form,	

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:

	Contam	inants	Utilization	· '
Description	Туре	% Wt	Rate - lbs/hr	Relate to Flow Diagram
Resin	Styrene	40	323.	Step 2
Gelcoat	Styrene	35	( )	Step 1
Gelcoat	Methyl Methacralat	e 5	49.5	Step 1
MEKP9	MEKP	34	4.7	Steps 1,2
Glue(adhesive)	1,1,1-Tri- chloroethan	e 34	3.5	Step 4
Acetone	Acetone	99	12.5	Steps1,1,5
Bottom Paint . Process Rate, i	*1 Misc. if applicable:	(See Section	v, Item 1)	Step 5 (outside)
l. Total Proce	ess Input Rate	(lbs/hr):		

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

Name of	Emiss	ion <sup>1</sup>	Allowed <sup>2</sup> Emission Rate per	Allowable <sup>3</sup> Emission	Potent Emiss	Relate to Flow	
Contaminant	Maximum lbs/hr	Actual T/yr	Rule 17-2	lbs/hr	lbs/yr	T/yr	Diagram
Styrene	29.8	57.2	Not Deter	nined	260,000	130.0	Step 1,2
Methyl Methacralate	3.96	7.6	Not Deter	nined	34,600	17.3	Step 1
MEKP	0.47	0.9	Not Deter	nined	4,000	2.0	Step 1,2
1,1,1-Tri- chloroethane		4.4	Not Deter	nined	20,100	10.1	Step 4
Acetone	6.25	12.	Not Deter		54,600		Step 1,2
*1 Misc. See Section V,	7 Item 2.	13.4	Not Deter	mined	61,000	30.5	Step 3,4

<sup>&</sup>lt;sup>2</sup>Reference applicable emission standards and units (e.g. Rule 17-2.600(5)(b)2. Table II, E. (1) - 0.1 pounds per million BTU heat input)

Product Weight (lbs/hr):\_\_\_\_\_

<sup>&</sup>lt;sup>3</sup>Calculated from operating rate and applicable standard.

<sup>&</sup>lt;sup>4</sup>Emission, if source operated without control (See Section V, Item 3).

n	Control	Devices:	1000	Caities	1/	T 4	۸,	١
•	CONCLOI	nearces:	(366	2666100	٧.	ıcem	4 /	,

Name and Type (Model & Serial No.)	Contaminant	Efficiency	Range of Particles Size Collected (in microns) (If applicable)	Basis for Efficiency (Section V Item 5)
Dust Collector Mfg Not Determine	SawDust(Wood	) ±99%	(Not Vented)	
<i>3</i> ,				
	:			
				:

## Fuels

		Consum	ption*	·		
ļ	Type (Be Specific)	avg/hr	max./hr	Maximum Heat Input (MMBTU/hr)		

*units: Natural GasMMCr/nr; Fuel Ulis g	allons/hr; Coal, wood, refuse, otherlbs/hr.
Fuel Analysis:	
Percent Sulfur:	Percent Ash:
Density:lbs/	gal Typical Percent Nitrogen:
Heat Capacity: BTU	/lbBTU/ga.
Other Fuel Contaminants (which may cause a	ir pollution):
F. If applicable, indicate the percent of Annual Average	
G. Indicate liquid or solid wastes genera  Contaminated acetone is recycle	ted and method of disposal.
	oxic and non-hazardous and is disposed

of offsite (incinerated)

		The state of the s			The second second	the state of the s	each stack):
Stack Heig	ght:	DOES	NOT AP	FLY ft. s	tack Diamet	er:	ft
Gas Flow A	Rate:		.,54			perature:	Sale and the sale of the sale
Water Vapo	or Content:			% V	locity:		FP.
		SECT	ION IV:	INCINERATO	OR INFORMATI	ION DOE	S NOT APPLY
			· ·	<u> </u>			
Type of Waste	Type O (Plastics)	Type I (Rubbish)	Type II (Refuse)	Type III (Garbage)	(Patholog-	Type V (Liq.& Gas By-prod.)	Type VI (Solid By-prod.)
Actual lb/hr Inciner- ated							
Uncon- trolled (lbs/hr)							
Approximat Manufacture	e Number of	Hours of (	peration	per day _	day/	wk	hr) wks/yr.
Date Const	ructed			Model	No.		
		Volume (ft) <sup>3</sup>	Heat R (BTU		Fuel Type	BIU/hr	Temperature (°F)
Primary Ch	namber		1919 - 1918				
Secondary	Chamber						
Stack Heigh	nt:	rt. S	tack Dia	nter:		Stack To	emp.
Gas Flow Ra	·	Y Jan Hilliam	ACFM		DSCFM*		FPS
	ore tons po foot dry ga					ions rate in	n grains per stan-
Type of pol	lution cont	rol device	: [ ] C <sub>&gt;</sub>	clone [	Wet Scrubt	er [ ] Aft	erburner
			[ ] Ot	her (speci	fy)		
	-1.202(1) ovember 30,		,	age 6 of 1	2		

•	1		٠.,								
			•		. '						
•											
Ultimate disposal ash, etc.):	of any	effluent	other than	that	emitted	from	the	stack	(scrut	bber	water,
	of any	effluent	other than	that	emitted	from	the	stack	(scrut	bber	water,
	of any	effluent	other than	that	emitted	from	the	stack	(scrut	bber	water,

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

# SECTION V: SUPPLEMENTAL REQUIREMENTS \*See Attachment I

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 air-borne emissions, in relation to the surrounding area, residences and other permanent structures and roadways (Example: Copy of relevant portion of USGS topographic map).
- 8. An 8 1/2" x 11" plot plan of facility showing the location of manufacturing processes and outlets for airborne emissions. Relate all flows to the flow diagram.

DER Form 17-1.202(1) Effective November 30, 1982

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
Α.	Are standards of performance for new stationary sources pursuant to 40 C.F.R. Part 60 applicable to the source?
•	[ ] Yas [ ] No

	·					
	[ ] Yes [ ] No					
	Contaminant			Rate or	Concentration	
•						
-			······································			
					·····	
В.	Has EPA declared the best available cont yes, attach copy)	rol	. technolo	gy for t	this class of	sources (I
	[ ] Yes [ ] No					
	Contaminant		, '	Rate or	Concentration	
		•	-		•	
С.	What emission levels do you propose as be	st	available	control	technology?	
	Contaminant	٠		Rate or	Concentration	
	<del></del>					· · · · · · · · · · · · · · · · · · ·
			• .			
				•		

- D. Describe the existing control and treatment technology (if any).
  - 1. Control Device/System:

Operating Principles:

3. Efficiency:\*

4. Capital Costs:

\*Explain method of determining

DER Form 17-1.202(1) Effective November 30, 1982

	Useful Life:	6	773	rating Cos				
7.	Energy:	8	Mai	ntenance C	ost:	· · ·		
9.	Emissions:						,	
	Contaminant			Rate	or Conce	entration	1	
					: .			
	1. 1							
	•				: -			
10.	Stack Parameters						·.	
a.	Height: ft	. ь	: Dia:	meter:				ft.
c.		м а.	Tem	perature:				۰F.
е.	Velocity: FP	S						
Des		hnolo	ov av	ailable (A	s many	tvoes as	annl	icable
			-	· · · · · · · · · · · · · · · · · · ·				
1.								
a.	Control Device:	<b>b</b> .	0 p e	rating Pri	nciples:			
с.	Efficiency: 1	·d	Сар	ital Cost:			٠.	
е.	Useful Life:	f.	Ope	rating Cost	t:			
g.	Energy: <sup>2</sup>	h.	Mai	ntenance Co	ost:			
i.	Availability of construction materi	als a	nd pro	ocess chemi	icals:			
j.	Applicability to manufacturing proc	esses	:					
k .	Ability to construct with control within proposed levels:	devic	e, ins	stall in a	vailable	space,	and	operat
2.								
a.	Control Device:	b <b>.</b>	Oper	rating Prin	ciples:		٠.	
c.	Efficiency: 1	d.	Capi	ital Cost:				
e.	Useful Life:	f.	Oper	rating *Cost	: <b>:</b>			
g.	Energy: 2	h.						
•			nd pro	cess chemi	cals:			
			_ p. (					
ergy	to be reported in units of electrics	al po	ver -	KWH design	rate.			
	9.  10. a. c. e. J. k. 2. a. c. e. g. i. plair	Contaminant  Control Contaminant  Control Control and treatment technic additional pages if necessary).  Control Device:  C. Efficiency:  C. Efficiency:  C. Energy:  Availability of construction materi  Applicability to manufacturing proc  k. Ability to construct with control of within proposed levels:  C.  Control Device:  C. Efficiency:  C. Eff	Contaminant  Contaminant  10. Stack Parameters  a. Height: c. Flow Rate:	Contaminant  Control Rate:  Control and treatment technology avuse additional pages if necessary).  Control Device:  Control Device:  Control Life:  Cope  Control Life:  Cope  Control Construction materials and project and proposed levels:  Control Device:  Contr	Contaminant Rate  ft. b. Diameter:  c. Flow Rate: ACFM d. Temperature:  e. Velocity: FPS  Describe the control and treatment technology available (Ause additional pages if necessary).  c. Efficiency:  d. Capital Cost:  e. Useful Life: f. Operating Cost:  g. Energy:  i. Availability of construction materials and process cheminates of the control Device:  k. Ability to construct with control device, install in a within proposed levels:  2.  a. Control Device: b. Operating Print Cost:  c. Efficiency:  d. Capital Cost:  c. Efficiency:  d. Capital Cost:  f. Operating Cost  d. Capital Cost:  d. Capital Cost:  c. Efficiency:  d. Capital Cost:  d. Capital Cost:  f. Operating Cost  d. Capital Cost:  d. Capital Cost:	Contaminant Rate or Conce  Contaminant Rate or Conce  10. Stack Parameters  a. Height: ft. b. Diameter: c. Flow Rate: ACFM d. Temperature: e. Velocity: FPS  Describe the control and treatment technology available (As many use additional pages if necessary).  1. a. Control Device: b. Operating Principles: c. Efficiency: 1 d. Capital Cost: e. Useful Life: f. Operating Cost: i. Availability of construction materials and process chemicals: j. Applicability to manufacturing processes: k. Ability to construct with control device, install in available within proposed levels: 2. a. Control Device: b. Operating Principles: c. Efficiency: d. Capital Cost: e. Useful Life: f. Operating Cost: d. Capital Cost: e. Useful Life: f. Operating Cost: d. Capital Cost: e. Useful Life: f. Operating Cost: d. Availability of construction materials and process chemicals:	Contaminant  Contaminant  Rate or Concentration  10. Stack Parameters  a. Height:  c. Flow Rate:  d. ACFM d. Temperature:  e. Velocity:  FPS  Describe the control and treatment technology available (As many types as use additional pages if necessary).  1.  a. Control Device:  b. Operating Principles:  c. Efficiency:  d. Capital Cost:  e. Useful Life:  f. Operating 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, within proposed levels:  2.  a. Control Device:  b. Operating Principles:  c. Efficiency:  d. Capital Cost:  f. Operating Cost:  h. Maintenance Cost:  i. Availability of construction materials and process chemicals:  plain method of determining efficiency.	Contaminant  Contaminant  Rate or Concentration  10. Stack Parameters  a. Height:  c. Flow Rate:  e. Velocity:  Poscribe the control and treatment technology available (As many types as appluses additional pages if necessary).  1.  a. Control Device:  b. Operating Principles:  c. Efficiency:  d. Capital Cost:  e. Useful Life:  f. Operating Cost:  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 within proposed levels:  2.  a. Control Device:  b. Operating Principles:  c. Efficiency:  d. Capital Cost:  e. Useful Life:  f. Operating Cost:  d. Capital Cost:  e. Useful Life:  f. Operating Cost:  h. Maintenance Cost:  i. Availability of construction materials and process chemicals:  plain method of determining efficiency.

Page 9 of 12

Effective November 30, 1982

Applicability to manufacturing processes: k. Ability to construct with control device, install in available space, and operate within proposed levels: 3. Control Device: ь. Operating Principles: я. Efficiency: 1 Capital Cost: c. Useful Life: f. Operating Cost: e. Energy: 2 Maintenance Cost: h. Availability of construction materials and process chemicals: Applicability to manufacturing processes: Ability to construct with control device, install in available space, and operate k. within proposed levels: 4. Operating Principles: Control Device: b. Efficiency: 1 Capital Costs: d. Useful Life: Operating Cost: f. Energy: 2 Maintenance Cost: h. g. Availability of construction materials and process chemicals: j. Applicability to manufacturing processes: Ability to construct with control device, install in available space, and operate within proposed levels: Deacribe the control technology selected: Control Device: 2. Efficiency: 1 3. Capital Cost: Useful Life: Operating Cost: .5. Energy: 2 Maintenance Cost: 8. 7. Manufacturer: Other locations where employed on similar processes; (1) Company: (2) Mailing Address: (3) City: (4) State:  $^{1}$ Explain method of determining efficiency.  $^2$ Energy to be reported in units of electrical power - KWH design rate.

DER Form 17-1.202(1) Effective November 30, 1982 Page 10 of 12

(5) Enviro	nmental Manager:					
(6) Telephi	one No.:					
(7) Emissi	ons:1					
	Contaminant			Rate or Cor	ncentration	
•						
(8) Process	Rate: 1					
b. (1) Com	pany:					
(2) Mailing	Address:					
(3) City:			(4) State:			
	mental Manager:					
	ne No.:					
(7) Emissio						
( , , , , , , , , , , , , , , , , , , ,	Contaminant			Rate or Cor	centration	
		·				
(0)		• •				
(8) Process						
	for selection and					
	provide this inforicant must state t			Should th	is informat	ion not t
					The state of the s	
•	SECTION VII - P	REVENTION OF	SIGNIFICAN	T DETERIORAT	ION DOES I	NOT APPLY
A. Company Moni	tored Data					
1.	no. sites	TSP	( )	_ so2*	Wind	spd/dir
Period of Mo	nitoring /		t	o <u>*</u> /da month da		and the second s
•	ecorded	Arran yaran	est a great de s			
Attach all d	ata or statistical	summaries t	o this appl	ication.		
*Specify bubbler	(B) or continuous	(c).				
DER Form 17-1.20 Effective November	2(1) er 30, 1982	Page 1	l of 12			

	2.	Instrumen	tation, Fie	ld and Lab	oratory						
	a.	∀as instr	umentation	EPA refere	nced or it	s equival	ent? [	] Yes [	] No		
	ь.	Was instr	umentation	calibrated	in accord	ance with	Departm	ent proce	dures?	an in Maria	
		[ ] Yes	[ ] No [ ]	Unknown							
в.	Met	sorologica	l Data Used	for Air O	uality Mod	eling					
	1.	Yes	r(s) of dat	a from	1	to		1			
		<del></del>	r(s) of dat	mon	th day y	ear mo	nth day	year			
	2.	Surface da	ata obtaine	d from (loc	cation)						
	. 3.	Unner air	(mixing he	ioht) data	obtained	from (loc	ation)				
	4.		wind rose		7 m		y 1 84994444	No. 1 Aug 6			
c.	Com	puter Mode:	ls lised								
•		paser 1.000.					40 . 7.6			" 	45.
	1.			7 7 7 7 7 7	,				.31		· • (
	2.					Modif	ied? If	yes, att	ach des	criptio	n.
	3.				and the second	Modif	ied? If	yes, att	ach des	criptic	on.
	4.					Modif	ied? If	yes, att	ach des	criptic	n.
	Att	ach copies	of all fin	al model ru	ıns showin	g input d	ata. reci	eptor loc	ations.	and pi	in-
		le output t									, 44, 47, 44
D.	App.	licants Max	kimum Allow	able Emissi	ion Data						
	Pol	lutant		Emissi	ion Rate				v. Sá		
		TSP . " .		to the state of th			_ grams/s	3 <b>8 C</b>			
		5 0 <sup>2</sup>			05 % . \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \		_ grams/s	ec			
Ξ.	Emis	ssion Data	Used in Mod	deling							
	Atta	ach list of	emission s		mission da	ita requi	red is so		e, desc	ription	o f

point source (on NEDS point number), UTM coordinate and normal operating time.

- Attach all other information supportive to the PSD review.
- Discuss the social and economic impact of the selected technology versus other applicable technologies (i.e., jobs, payroll, production, taxes, energy, etc.). assessment of the environmental impact of the sources.
- 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.

#### ATTACHMENT I

#### SECTION V: SUPPLEMENTAL REQUIREMENTS

- 1. Not required.
- 2. See Attachment II.
- 3. Attached see Exhibit "A", Part 1 excerpt from Cal-OSHA study indicating the emmission factor for styrene from resins is 6%, Part 2 Product data sheets.
- 4. Dust collector not vented to atmosphere.
- 5. Dust Collector not vented efficiency = 100%
- 6. See Exhibit "B".
- 7. See Exhibit "C".
- 8. See Exhibit "D".
- 9. \$750 permit fee.
- 10. Not required.

# UTILIZATION RATE:

RESIN

1,240,000 16/4ear 18 will x 5 days X 16 hrs

323 lbs/hr.

GELCOAT

190,000 lbs/year-48 wrs x5 days X16 hrs

49.5 lbs/hr.

MEKP-9

CONT.

18,000 lbs/year - 48 wks x 5 days x 16 hrs day

4,7 163/hr.

GLUE (Adlesive)

13,40 lbs/4r. -18 wk= X5 days X16 hrs

ACETONE

48,000 lbs/40.

12.5 165/hr.

BOTTOM PAINT

45,000 lbs/yr.

46 WKS X5 days X16 hrs = 11.7 lbs/hr.

# EMISSIONS:

(Emissions rate) (utilization rate) = emissions

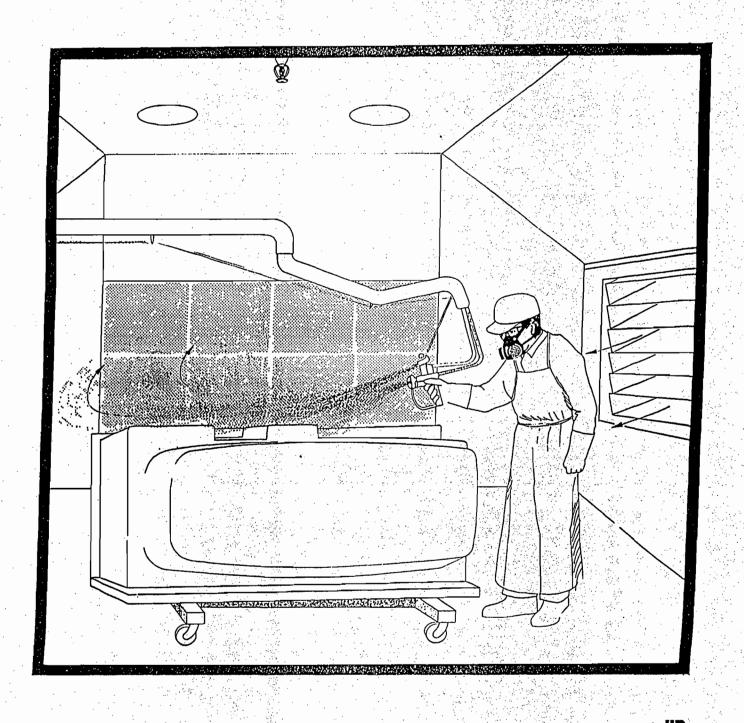
Helhyl Helhacralale

\* REPORTING NOT REQUIRED

# Occupational Exposures to Styrene and Other Health Hazards in the

Fiberglass Reinforced Plastics Industry

A Special Studies Report by



Department of Industrial Relations State of California George Deukmejian, Governor Ron Rinaldi, Director of Industrial Relations

worker performed almost continuous spraying while standing on a portable platform that was inserted into the tank that also supported a large duct with high velocity airflow that exhausted vapors very close to the point of generation.

Two facilities, using a unique production process to ensure good secondary bonding between resin layers, also had the side effect of obtaining low ambient exposure levels from the process. After gelcoating and hand laminating the mold, the part was covered with plastic sheeting and a vacuum pulled while the part is curing. Covering the part and pulling a vacuum through the space between the part and the plastic, removes styrene vapor from the work place air and reduces employee exposure.

The majority of companies which installed some form of dilution ventilation, for example, filter banks on the walls that pull a large volume of air, were mostly ineffective. They were either too far from the source of the exposure or were defeated by lack of directionality and turbulence.

### Substitution

NIOSH estimates that approximately 6% of styrene monomer in a 40/60 polyester resin mixture vaporizes during the curing process. Methyl styrene (also called vinyl toluene) is a close chemical cousin of styrene that has a lower vapor pressure, reducing the amount of vaporization. Methyl styrene has three isomers, para, meta, or the ortho form. Two production facilities were using a resin mixture containing 60% polyester, 14% styrene and 26% para-methyl styrene.

### FIGURE V.3

### Styrene and the Three Isomers of Methyl Styrene

EXHIBIT "A" PART 2

# IVIATERIAI Satety Data Sneet

Manufactur# # Name	Alpha Resins Corporation	Emergency Telephone N		431
Address	4620 N. Galloway Road Lakeland, Florida 33805	Other Information Calls	(813) 858-44	31
Signature of Persi Responsible for P		Date Prepared I	Dec. 31, 1987	
SECTION I	- IDENTITY			
Common Name: In		Cis No.	Mixture	
Chereical Uns	sturated Polyester Resin	Chemical Family	Diacid/Glyco	1 Condensat
Formula Mix	ture			
SECTION 2	- HAZARDOUS INGREDIENTS			
Principal Hasardou	us Componential (chemical & common harment)	<b>1</b>	OSHA	PEL
STYRENE	( 100-42-5)	39	100	<del></del>
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			and the second of the second o	
· · · · · · · · · · · · · · · · · · ·				
		1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1		e e e
SECTION 3	- PHYSICAL & CHEMICAL CHARA	CTERISTICS (Fire & E.	xplosion Data)	
Soiling 293	o <sub>F</sub>	Specific Gravity (H,O=II 1, 0 1	Vapor 1 Pressure tono Hgo	4.5
Percent Volatile	39 Vapor Density (Air = 1) 3.6	Evaporation Rapa (Bu Act-1) 3.1		
alubilie e	y slight	Reactivity in None		
od Odor Visc	cous liquid with sweet pungent			
issh	Flammable Limits Lower Upper in Air % by Volume 1.1 6.1	Extinguisher Water fog, f	oam Auto-Ignition Temperature	
pecial Fire ighting Procedure			foam should be a	voided.
	Handling equipment should be			<del></del>
nusual Fire and	Ap alamana			
xplosion Hazards		The second secon	1 - 1 W/2 - 1 - 1	1 1 1 1 1 1 1
·	take place resulting in vio	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
	pressure apparatus, eye pro	tection, and keep va	pors away from po	881DIE
	ignition sources.			
ECTION 4 -	PHYSICAL HAZARDS			
ability Unstable Stable	O Cooditions Sunlight, open flame 20 to Avoid 750 F	s, contamination, a	nd prolonged stor	age above
comparability	Acids, oxidizing agents, fre	e radical initiators	s such as peroxide	es, and
	metallic halides and soaps.			
Atardous Acomposition Proc	May Occur & Conditions Open (James, Work Occur L) to Avoid sunlight or b			

	The second secon
SECTION 5 - HEALT	H HAZARDS
Signs and I. Acus Symptoms of Exposure Over	exposure May irritate eyes, nose, throat, and skin.
Chrone	el drugged, become sleepy, or unconscious. Repeated skin contact may
cause I	
ferical Conditions Geography	Pre-existing respiratory and skin disorders
homical Listed as Carmnogen r Potential Carcinogen	Neucosi Texicology Yes C I.A.R.C. Yes C OSHA Yes C Program No Q Monographs No Q
23HA Permissible Exposure Lifett 100p	pm Limit Value 50ppm Limit Used STEL=100ppm
meratory and	IMARY ROUTES OF ENTRY
To be all solves	posed person(s) to fresh air. Get medical attention.
Contact lens	should not be worn while working with this material. Immediately.
THE PARTY OF THE P	y of water for at least 15 minutes. Get prompt medical attention.
Why a	
	skin with soap and water. Get medical attention if irritation
	e contaminated clothing, shoes, and thoroughly clean before reuse.
DO NOT 1:	nduce vomiting. Call physician immediately.
ECTION 6 - SPECIA	L PROTECTION INFORMATION
penirstory Presentes Chem	ical cartridge respirator with NIOSH/OSHA approved organic vapor
<del>''''''                               </del>	ridge to 400ppm. Above 400ppm SCBA.
oct acion	Local Mechanical Special Other Exhaust Preferred (General) Acceptable Explosion proof N/A
rotective Rubber or	other resistant material Protection Chemical goggles
About Prostaurius	cal resistant aprons or coats to avoid skin contact.
ECTION 7 - SPECIAL	L PRECAUTIONS AND SPILL/LEAK PROCEDURES
	e in an area below 75° F and out of direct sunlight. Keep from
	, spark, and smoking areas. Empty containers may be hazardous.
har	not transfer to bottles or unlabeled containers. Equipment should be
	unded during transfer with non-sparking pumps used.
epe to be Taken in Case sterial is Reiseased or Spilled	Remove all sources of ignition. Ventilate area. Prevent material
from	entering drains. Absorbent should be vermicalite, dry sand or earth
esce Disposal schools Smg 1	1 spill - Soak up with absorbent and accop into drums.
	e spill - Dike and pump into drums. Dispose of in accordance with
·······	1 state and federal regulations.
	- seers and rederat regulations.
<i>ፈ</i> ውረን ድጥል እም	

**EMPORTANT** 

Do not leave any blank spaces. If required information is unavailable, unknown, or does not apply, so indicate.

THE ALPHA CORPORATION HAS MADE EVERY EFFORT TO ENSURE THE ACCURACY OF THE FOREGOING INFORMATION. NO WARRANTIES OF ACCURACY ARE MADE, HOWEVER, AS TO CHEMICAL OR PHYSICAL CHANGES THAT MAY OCCUR IN THE TRANSPORTATION, STORAGE OR USE OF THIS MATERIAL AFTER IT LEAVES ALPHA'S CONTROL.

SECTION I - MANUFACTURERS INFORMATION

RODUCT CODE IDENTITY: 944WA62 330 PRODUCT NAME: WHITE Gel Cout lame : COOK PAINT AND VARNISH COMPANY DATE OF MSDS: 01/15/88 01/15/88

KANSAS CITY. MO 64141-6389

EMERGENCY TELEPHONE: 816-391-6000 INFORMATION TELEPHONE: 816-391-6003 EMERGENCY TELEPHONE:

ATTN: SAFETY AND HEALTH OFFICER SEA RAY BOATS-KNX

CUSTOMER NUMBER: 285455 2601 SEA RAY BLVD DATE PRINTED: 04/25/88

KNOXVILLE TN 37914

SECTION II - HAZARDOUS INGREDIENTS

TYRENE MONOMER

CAS #: 100-42-5 VAPOR PRESSURE: PERCENT: 35.000

(MMHG/DEG F)

EXPOSURE LIMIT: ACGIH TLV/TWA:

50 PPM (SKIN) (215 MG/CU.M.) 100 PPM (SKIN) (425 MG/CU.M.) 100 PPM (425 MG/CU.M.) 200 PPM (850 MG/CU.M.) ACGIH TLV/STEL: OSHA PEL: OSHA PEL/CEILING:

OSHA: 600 PPM/5 MIN/3 HR PEAK OTHER:

ITANIUM DIOXIDE EE ACGIH TLV BOOKLET. APPENDIX D

PERCENT: 15.000 VAPOR PRESSURE: CAS #: 13463-67-7 N/A

(MMHG/DEG F)

EXPOSURE LIMIT: 10MG/CU.M. AS DUST. 5MG/CU.M. AS FUMES ACGIH TLV/TWA:

OSHA PEL: 15MG/CU.M.

ILICA, AMDRPHOUS

VAPOR PRESSURE: CAS #: 7531-86-9 PERCENT: LESS THAN 5 N/A

(MMHG/DEG F)

EXPOSURE LIMIT: 10MG/CU.M. TOTAL DUST ACGIH TLV/TWA:

OSHA PEL:

ALC (HYDROUS MAGNESIUM SILICATE)

VAPOR PRESSURE: CAS #: 14807-96-6 PERCENT: 10.000 N/A

(MMHG/DEG F)

EXPOSURE LIMIT: ACGIH TLV/TWA: 2 MG/M3 RESPIRABLE DUST

OSHA PEL: 20 M PPCF

ETHYL METHACRYLATE

VAPOR PRESSURE: 29.0 CAS #: 80-62-6 PERCENT: 5.000

(MMHG/DEG F)

EXPOSURE LIMIT:

ACGIH TLV/TWA: 100 PPM (410 MG/CU.M.) 125 PPM (510 MG/CU.M.) 100 PPM (410 MG/CU.M.)

OSHA PEL:

AXIMUM VOC NOT CONSUMED DURING CURING IS 40 GRAM/LITER (OR 230 GRAMS/SQUARE ETER OF SURFACE AREA OPEN TO AIR). MAXIMUM VOC OF UNCATALYZED RESINS AND GEL DATS IS 600 GRAMS/LITER.

jupues ford &

RODUCT CODE IDENTITY: 944WA62 330

PRODUCT NAME: WHITE

SECTION III - HEALTH HAZARD DATA

FFECTS OF OVEREXPOSURE TO PRODUCT. PRIMARY ROUTES OF ENTRY ARE:

EYE CONTACT: IRRITATION. SYMPTOMS ARE TEARING, REDNESS AND DISCOMFORT.

IRRITATION . CAN CAUSE DEFATTING OF SKIN WHICH MAY LEAD TO. SKIN CONTACT:

DERMATITIS.

IRRITATION TO NOSE AND THROAT. EXTENDED OR REPEATED EXPOSURE INHALATION:

TO CONCENTRATIONS ABOVE THE RECOMMENDED EXPOSURE LIMITS MAY CAUSE BRAIN OR NERVOUS SYSTEM DEPRESSION. CAUSING DIZZINESS, HEADACHE OR NAUSEA AND IF CONTINUED INDEFINITELY, LOSS OF

CONSCIOUSNESS. LIVER AND KIDNEY DAMAGE.

REPORTS HAVE ASSOCIATED REPEATED OR PROLONGED OCCUPATIONAL OVEREXPOSURE TO SOLVENTS WITH PERMANENT BRAIN AND NERVOUS

SYSTEM DAMAGE.

MAY CAUSE MOUTH, THROAT, ESOPHAGUS AND STOMACH IRRITATION, NAUSEA, VOMITING AND DIARRHEA. INGESTION:

EDICAL CONDITIONS THAT MAY BE AGGRAVATED BY EXPOSURE TO THIS PRODUCT:
PREEXISTING EYE, SKIN, LIVER, KIDNEY AND RESPIRATORY DISORDERS.

MERGENCY AND FIRST AID PROCEDURES:

IN CASE OF EYE CONTACT. FLUSH IMMEDIATELY WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES AND GET MEDICAL ATTENTION; FOR SKIN. WASH THOROUGHLY WITH SOAP AND WATER. IF AFFECTED BY INHALATION OF VAPORS OR SPRAY MIST, REMOVE TO FRESH IF SWALLOWED. GET MEDICAL ATTENTION IMMEDIATELY.

### SECTION IV - PHYSICAL DATA

DILING POINT, DEG. F. 212

VAPOR DENSITY IS HEAVIER THAN AIR

EIGHT PER GALLON: 10.76

EVAPORATION RATE IS SLOWER THAN ETHER

ERCENT VOLATILE BY VOLUME: 53.826

SECTION V - FIRE AND EXPLOSION HAZARD DATA

SHA FLAMMABILITY CLASSIFICATION: FLAMMABLE LIQUID CLASS LC

LASH POINT SETA CLOSED CUP. DEG F:

IT HAZARD CLASS: RED-LABEL . FLAMMABLE LIQUID

LEL:

KTINGUISHING MEDIA: FOAM, CARBON DIDXIDE, DRY CHEMICAL, WATER FOG.

USUAL FIRE AND EXPLOSION HAZARDS:
IF POLYMERIZATION TAKES PLACE IN A CONTAINER, THERE IS POSSIBILITY OF VIOLENT RUPTURE OF THE CONTAINER. STYRENE VAPORS ARE UNINHIBITED AND MAY FORM POLYMERS IN VENTS OR FLAME ARRESTORS OF STORAGE TANKS RESULTING IN STOPPAGE OF VENTS. VAPORS MAY CAUSE FLASH FIRE. KEEP CONTAINERS TIGHTLY CLOSED AND ISOLATE FROM HEAT. ELECTRICAL EQUIPMENT, SPARKS AND FLAME. NEVER USE WELD! NEVER USE WELDING OR CUTTING TORCH ON OR NEAR DRUM (EVEN EMPTY) BECAUSE PRODUCT (EVEN JUST RESIDUE) CAN IGNITE EXPLOSIVELY.

PECIAL FIRE FIGHTING PROCEDURES:

FULL PROTECTIVE EQUIPMENT INCLUDING SELF-CONTAINED BREATHING APPARATUS SHOULD BE USED. WATER SPRAY MAY BE INEFFECTIVE. IF WATER IS USED, FOG NOZZLES ARE PREFERABLE. WATER MAY BE USED TO COOL CLOSED CONTAINERS TO PREVENT PRESSURE BUILD-UP AND POSSIBLE AUTO-IGNITION OR EXPLOSION WHEN EXPOSED TO EXTREME HEAT

RODUCT CODE IDENTITY: 944WA62 3.30 PRODUCT NAME: WHITE

### SECTION VI - REACTIVITY DATA

HAZARDOUS POLYMERIZATION: MAY OCCUR.

CONDITIONS TO AVOID:

ELEVATED TEMPERATURES. IMPROPER ADDITION OF PROMOTER AND/OR CATALYST. AVOID DIRECT CONTACT OF MEKP CATALYST WITH ACCELERATOR. IF AN ACCELERATOR SUCH AS COBALT DRIER IS TO BE ADDED. MIX THIS ACCELERATOR. WITH BASE MATERIAL BEFORE ADDING CATALYST.

NCOMPATIBILITY (MATERIALS TO AVOID):

OXIDIZERS, PEROXIDES, STRONG ACIDS, ALUMINUM CHLORIDE AND VINYL POLYMERS.

AZARDOUS DECOMPOSITION PRODUCTS:

THERMAL DECOMPOSITION OR COMBUSTION CAN PRODUCE FUMES CONTAINING ORGANIC ACIDS. CARBON DIOXIDE AND CARBON MONOXIDE.

### SECTION VII - SPILL OR LEAK PROCEDURES

TEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

REMOVE ALL SOURCES OF IGNITION (FLAMES. HOT SURFACES. AND ELECTRICAL.

OR FRICTIONAL SPARKS). AVOID BREATHING VAPORS. VENTILATE AREA. CON CONTAIN AND REMOVE WITH INERT ABSORBENT AND NON-SPARKING TOOLS

ASTE DISPOSAL METHOD:
DISPOSE OF IN ACCORDANCE WITH LOCAL. STATE AND FEDERAL REGULATIONS.
INCINERATE CLOSED CONTAINERS. INCINERATE IN APPROVED FACILITY. DO:NOT

### SECTION VIII - SPECIAL PROTECTION INFORMATION

### ESPIRATORY PROTECTION:

DO NOT BREATHE OR INGEST VAPORS, SPRAY MIST OR DUST WHILE APPLYING. SANDING. GRINDING. OR SAWING CURED PRODUCT. WEAR AN APPROPRIATE. (NIOSH/MSHA APPROVED) PROPERLY FITTED RESPIRATOR DURING APPLICATION AND OTHER USE OF THIS PRODUCT UNTIL ALL VAPORS. MISTS. AND DUSTS ARE EXHAUSTED. UNLESS AIR MONITOR-ING DEMONSTRATES VAPOR AND MIST AND DUST LEVELS ARE BELOW APPLICABLE LIMITS. FOLLOW RESPIRATOR MANUFACTURER'S DIRECTIONS FOR RESPIRATOR USE. OBSERVE OSHA STANDARD 29CFR 1910.134.

### ENTILATION:

PROVIDE GENERAL CLEAN AIR DILUTION OR LOCAL EXHAUST VENTILATION IN VOLUME AND PATTERN TO KEEP THE AIR CONTAMINANT CONCENTRATION BELOW THE LOWER EXPLOSION LIMIT AND BELOW CURRENT APPLICABLE EXPOSURE LIMITS IN THE MIXING. APPLICATION AND CURING AREAS; AND TO REMOVE DECOMPOSITION PRODUCT DURING WELDING AND FLAME CUTTING ON SURFACES COATED WITH THIS PRODUCTS IN CONFINED AREAS. USE DNLY WITH FORCED VENTILATION ADEQUATE TO KEEP VAPOR CONCENTRATION BELOW 20% OF LOWER EXPLOSION LIMITS. REFER TO OSHA STANDARDS 29CFR 1910.94. 1910.107. 1910.108.

HEAVY SOLVENT VAPORS SHOULD BE REMOVED FROM LOWER LEVELS OF THE WORK AREA ND ALL IGNITION SOURCES (NONEXPLOSION-PROOF MOTORS. ETC.) SHOULD BE ELIMINATED.

ROTECTIVE GLOVES: USE SOLVENT IMPERMEABLE GLOVES TO AVOID CONTACT WITH PRODUCT

DO NOT GET IN EYES. DUSE SAFETY EYEWEAR WITH SPLASH GUARDS OR SIDE SHIELDS. CHEMICAL GOGGLES. FACE SHIELDS.

THER PROTECTIVE EQUIPMENT:
AVOID CONTACT WITH SKIN. USE PROTECTIVE CLOTHING PREVENT CONTACT WITH CONTAMINATED CLOTHING. WASH CONTAMINATED CLOTHING, INCLUDING SHOES, BEFORE REUSE.

### SECTION IX - SPECIAL PRECAUTIONS

RECAUTIONS TO BE TAKEN IN HANDLING AND STORING: DD NOT STORE ABOVE 120 DEG. F. STORE LARGE QUANTITIES IN BUILDINGS DESIGNED RODUCT CODE IDENTITY: 944WA62 330

PRODUCT NAME: WHITE

TO COMPLY WITH OSHA 1910.106. KEEP AWAY FROM HEAT, SPARKS AND FLAME. KEEP CONTAINERS CLOSED WHEN NOT IN USE AND UPRIGHT TO PREVENT LEAKAGE.

THER PRECAUTIONS:

CONTAINERS SHOULD BE GROUNDED WHEN POURING. DO NOT TAKE INTERNALLY. WASH HANDS AFTER USING AND BEFORE SMOKING OR EATING. EMPTIED CONTAINERS MAY RETAIN HAZARDOUS RESIDUE AND EXPLOSIVE VAPORS. KEEP AWAY FROM HEAT, SPARKS AND FLAMES. DO NOT CUT, PUNCTURE OR WELD ON OR NEAR EMPTIED CONTAINERS. FOLLOW ALL HAZARD PRECAUTIONS GIVEN IN THIS DATA SHEET UNTIL CONTAINER IS THOROUGHLY CLEANED OR DESTROYED. IF THIS PRODUCT IS BLENDED WITH OTHER COMPONENTS SUCH AS THINNERS. CONVERTER. COLORANTS AND CATALYSTS PRIOR TO USE. READ ALL WARNING LABELS. ANY MIXTURE OF COMPONENTS WILL HAVE HAZARDS OF ALL COMPONENTS. FOLLOW ALL PRECAUTIONS. IF SPRAYING THIS MATERIAL. KEEP SPRAY BOOTHS CLEAN. AVOID BUILDUP OF SPRAY DUST OR OVERSPRAY IN BOOTHS OR DUCTS.

KEEP OUT OF REACH OF CHILDREN

FOR INDUSTRIAL USE ONLY

### DISCLAIMER AND LIMITATION OF LIABILITY

TO THE BEST OF OUR KNOWLEDGE, THE INFORMATION CONTAINED HEREIN IS ACCURATE. TO THE EXTENT ALLOWED BY LAW. THIS STATEMENT IS MADE IN LIEU OF ANY OTHER WARRANTIES. EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, AND IS IN LIEU OF ANY OTHER OBLIGATIONS OR LIABILITY ON THE PART OF COOK PAINT AND VARNISH COMPANY.

COOK PAINT AND VARNISH COMPANY WILL NOT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES. FINAL DETERMINATION OF THE SULTABILITY OF THE MATERIAL FOR THE USE CONTEMPLATED. THE MANNER OF USE, AND WHETHER THE SUGGESTED USE INFRINGES ANY PATENT IS THE SOLE RESPONSIBILITY OF THE BUYER.

# MATERIAL SAFETY DATA SHEET

. PEB 0 9 1988

### SECTION IN THE SECTION

MANUFACTURER

THE NORAC COMPANY, INC.

THE NORAC COMPANY, INC.

EMERGENCY TELEPHONE 818-334-2908
405 S. MOTOR AVENUE, AZUSA, CA 91702 CHEMTREC 1-800-424-9300

ADDRESS

NOROX MEKP-9

CAS NO. 1338-23-4

PRODUCT NAME CHEMICAL NAME

METHYL ETHYL KETONE PEROXIDE (MEKP)

CHEMICAL FAMILY ORGANIC PEROXIDE

FORMULA MIXTURE OF MANY

## SECTION II - HAZARDOUS INGREDIENTS

COMPONENTS METHYL ETHYL KETONE PEROXIDES 34
DIMETHYL PHTHALATE 58
2 ETHYL HEXYL ACETATE 7
HYDROGEN PEROXIDE 1

HAZARD DATA

ORAL--RAT LD50:484 mg/kg ORAL--RAT LD50:690C mg/kg ORAL--RAT LD50:3000 mg/kg SKIN--RAT LD50:4060 mg/kg

BOILING POINT °F UNKNOWN

SPECIFIC GRAVITY (Water =1) 1.1

VAPOR PRESSURE mm Hg. UNKIJONN

PERCENT VOLATILE BY VOLUME

UNKNOWN

VAPOR DENSITY (Air =1) >1

SOLUBILITY IN WATER SLIGHT

EVAPORATION RATE:

APPEARANCE AND ODOR WATER WHITE LIQUID, SLIGHT ODOR Note 0.2% Red Dye may be added for color

SECTION IV - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE 1.5 mg/H3 FOR METHYL ETHYL KETONE PEROXIDES

FFECTS ) F

PROLONGED INHALATION OF VAPORS MAY CAUSE MUCOUS MEMBRANE IRRITATION

AND VERTIGO.

IVER~

XPOSURE

MEKP IS A STRONG TRRITANT. AVOID SWALLOWING AND ALL CONTACT WITH EYES AND SKIW. WASH CONTAMINATED AREAS THOROUGHLY WITH SOAP AND WATER. FOR EYES, IRRIGATE THE DIATELY FOR 30 MINUTES -- CALL A PHYSICIAN. IF SWALLOWED, TAKE LARGE QUANTITIES OF MILK OR WATER AND IMMEDIATELY CALL A PHYSICIAN, FOR AD TO PHYSICIAN, SUGGEST POISON CONTROL CENTER (213) 484-5151 DAY OR NIGHT -

HERGENCY ٩D :SST

SECTION V - REACTIVITY DATA

INCOMPATABILITY DIMETHYLANILINE, COBALT NAPTHENATE & (Materials to avoid) REDUCING AGENTS, OR ANY HOT MATERIAL DIMETHYLANILINE, COBALT NAPTHENATE & OTHER PROMOTERS, ACCELERATORS

STABLE WHEN KEPT IN ORIGINAL. CLOSED CONTAINER, OUT OF DIRECT SUNLIGHT J. ABILITY

AT TEMPERATURES BELOW 80°F.

HAZARDOUS

DECOMPOSITION PRODUCTS OF UNKNOWN

HAZARDOUS POLYMERIZATION WILL NOT OCCUR

SECTION VI - SPECIAL PROTECTION INFORMATION

RESPIRATORY

VENTILATION

NONE

PROTECTION

MECHANICAL GENERAL

EYE PROTECTION ...

SAFETY GOGGLES RECOMMENDED.

GLOVES

PROTECTIVE GLOVES RECOMMENDED (SOUVENT RESISTANT)

OTHER -

NONE

SECTION VII - FIRE AND EXPLOSION DATA

FLASH POINT (Method used) >200°F (C.O.C)

FLAMMABLE LIMITS: UNKNOWN

- YTINGUISHING ...EDIA

WATER FROM A SAFE DISTANCE -- PREFERABLY WITH A FOG NOZZLE. IN CASE OF VERY SMALL FIRES, OTHER MEANS SUCH AS CARBON DIOXIDES FORM OR DRY CHEMICALS EXTINGUISHERS MAY BE EFFECTIVE. DRY CHEMICAL COMBINED WITH MEKP MAY REIGNITE. LIGHT WATER ADDITIVES MAY BE PARTICULARLY EFFECTIVE AT EXTINGUISHING MEKP FIRES. IF DRY CHEMICAL IS USED TO EXTINGUISH AN MEKP FIRE. THE EXTINGUISHED

SPECIAL FIRE FIGHTING

PROCEDURES

AREA MUST BE THOROUGHLY WET WITH WATER TO PREVENT REIGNITION.

UNUSUAL FIRE AND

THE HEAT OF DECOMPOSITION OF THE PEROXIDES ADD TO THE HEAT OF THE FIRE EXPLOSION HAZARDS DRY CHEMICAL FIRE EXTINGUISHING AGENT MAY CATALYZE THE DECOMPOSITION.

SECTION VIII - SPILL OR LEAK PROCEDURES

STEPS TO BE

TAKEN IN EVENT OF

SPILLOR RELEASE

DIKE TO PREVENT RUNOFF FROM ENTERING DRAINS, SEVERS, STREAMS, ETC., AND TRANSFER INTO CONTAINER. SPILLED MATERIAL SHOULD BE SWEPT UP WITH AN INERT, MOIST, DILUENT SUCH AS PERLITE, WERMICULITE, OR SAND, AND PLACED

THEA CLEAR POLYETHYLENE LINED DRUBBOR POLYETHYLENE DRUK.

WASTE DISPOSAL INMEDIATELY DISPOSE OF WASTE MATERIAL IN ACCORDANCE WITH FEDERAL, STATE

AND LOCAL REGULATIONS.

SECTION IX - SPECIAL PRECAUTIONS

RECAUTIONS TO BE TAKEN MEKP SHOULD MEVER BE ADDED TO HOT SOLVENTS OR MONOMERS AS VIOLENT IN HANDLING AND STORING DECOMPOSITION AND/OR REACTION WAY RESULT ... WHEN USING SPRAY : 100 EQUIPMENT: HEVER SPRAY RAW MEKP ONTO CURING OR INTO RAW RESIN OR DTHER

PRECAUTIONS

FLUES. KEEP MEKP IN ITS ORIGINAL CONTAINER, DO NOT STORE WITH

FOOD OR DRINK. DO NOT USE NEAR FOOD OR DRINK



DATA SHEET

66070 by w.t.

PRODUCT NUMBER: 69 X 3063

DESCRIPTION: 69x3063 is a clear adhesive for bonding carpet and foam for marine and RV applications. Good open time and heat resistance.

APPLICATION: Apply 69x3063 either by spray, brush, or roller.

PHYSICAL CHARACTERISTICS:

BASE: Thermoplastic Rubber

COLOR: (DRY): Straw

(WET): Amber

SOLIDS: 34% +/- 1%

VISCOSITY: 1000 + /- 200 cps

WEIGHT PER GALLON: 10.0 lbs/gal

DILUENT: 1,1,1-Trichloroethane

SHELF LIFE: 6 Months

HEAT RESISTANCE: 200 F.

MANUFACTURER MAKES NO WARRANTY, EXPRESSED OR IMPLIED. OF MERCHANTABILITY OF THE PRODUCT OR FITNESS OF THE PRODUCT FOR A PARTICULAR PURPOSE. Manufacturer shall not be liable to Purchaser or any other person for loss or damage directly, indirectly, or consequentially arising from or related to the use of this product.

The user of this product assumes all risks of use and/or handling, whether or not in accordance with any directions or suggestions of the Manufacturer or Seller.

PURCHASER'S REMEDY IS LIMITED TO THE REPLACEMENT OF PRODUCT.

For industrial or professional use only. If resold or repackaged for any use other than industrial or professional containers must be labeled in accordance with the Federal Hazardous Substances Labeling Act.

GENERAL ADHESIVES 70 Volume
MATERIAL SAFETY DATA SHEET = 6670

===SECTION I - MANUFACTURER'S INFORMATION===

MANUFACTURER'S NAME AND ADDRESS

GENERAL ADHESIVES 6100 CENTENNIAL BLVD. NASHVILLE, TN. 37209

EMERGENCY TELEPHONE NUMBERS

WEEKDAYS (615) 350-8555

NIGHTS/WEEKENDS (615) 350-8989 MSDS INFORMATION (615) 350-8555

DATE PREPARED:

Revised February 19, 1988

SIGNATURE OF PREPARER: Lisa Dishmer

IDENTITY: 69 X 3063

TRADE NAME: Carpet/Foam Adhesive

===SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION=== (Specific Chemical Identity; Common Name(s))

OSHA PEL ACGIH TLV OTHER LIMITS CAS# HAZARDOUS COMPONENTS 7 Stoddard Sclvent 5-1070 500 ppm 100 ppm STEL 200 ppm 8052 41-3 Methyl Chloroform 50-6090 350 ppm (1,1,1-Trichloroethane) 350 ppm STEL 450 ppm Diethylene Ether (Skip) \* 100 ppm 25 ppm STEL 100 ppm 123-91-1

\*The Diethylene Ether is an inhibitor in the 1,1,1-Trichloroethane. This product contains more than 0.1% but less than 3.0% Diethylene Ether. Potential risks to humans can b minimized by observing good work practices and personal hygiene procedures.

Musical Spirits, Vorsale 5-10

===SECTION III - PHYSICAL CHEMICAL CHARACTERISTICS===

Boiling Point (F): 165-380 F Vapor Pressure: 92 @ 20 C Vapor Density: >1

(Air=1)

(mm Hg.)

Specific Gravity: 1.25 Melting Point: N/A Evaporation Rate: 4.9

(Water=1)

(Butyl Acetate=1)

Solubility in Water: None.

Appearance and Odor: Natural or red in color; solvent odor.

===SECTION IV - FIRE AND EXFLOSION HAZARD DATA===

Flash Point (F): None Method Used: TCC

Flammable Limits: (LEL) 8.0% (UEL) 10.5%

Extinguishing Media: CO2, Dry Chemical, Foam, Halon.

Special Fire Fighting Procedures: Self-contained breathing apparatus must be worn.

Unusual Fire and Explosion Hazards: Cool drums with water spray to prevent pressure explosion. Vapors may ignite explosively.

### ===SECTION V - REACTIVITY DATA====

STABILITY:	Stable: XXX	Unstable	•			
Transportabili	tu (Matariala ta	المنام المنام	tira matala		A T	
		yvora). Vči	cive mecais	Such as 1	11 am 11 am, 2.1	nc, Magnesium, etc.
Strong acids	or bases.					하고싶었다면 그런 이상점
	*					에 없는데 모르는 것을 살았다.
Hazardous Dec	composition or By	products: HC	L. Carbon	Monoxide,	Chlorine an	d Products of parti
decomposition	l•.					
	****					
Hazardous Pol	ymerization:	May Occur:_	W	ill Not Oc	cur: XXX	
						생 경기 있는 그 사가 그 안전하

Conditions to Avoid: Contact with active metals such as Aluminum, Zinc, Magnesium, etc.,

== SECTION VI - HEALTH HAZARD DATA ===

### ROUTES OF ENTRY

INCESTION:

flame, spark or extreme heat.

ACUTE HEALTH HAZARDS: Unlikely route of exposure. Ingesting this product may cause gastrointestinal irritation, nauses, vomiting and diarrhea.

CHRONIC HEALTH HAZARDS: N/E

EMERGENCY AND FIRST AID PROCEDURES: Do not induce vomiting. Keep the affected person warm, quiet and get medical attention. Aspiration of this material into the lungs du to vomiting can cause chemical pneumontis which can be fatal.

SKIN:

ACUTE HEALTH HAZARDS: May cause skin irritation, jaundice or dermatitis. This product may be absorbed through the skin.

CHRONIC HEALTH HAZARDS: Reproductive abnormalities have been noted in studies animals exposed to high concentrations.

EMERGENCY AND FIRST AID PROCEDURES: If this product comes in contact with the skin, promptly wash the contaminated skin using soap and water or a skin cleanser. If this product soaks through the clothing, remove the clothing promptly and wash the skin with soap and water or a skin cleanser. If irritation persist after washing, get medical attention, not wear contaminated clothing before laundering.

EYES:

ACUTE HEALTH HAZARDS: If this product is splashed into the eye, may cause seve irritation, pain, slight corneal injury, redness, tearing and blurred vision.

CHRONIC HEALTH HAZARDS: N/E

EMERGENCY AND FIRST AID PROCEDURES: If this product gets in the eyes, wash eye immediately with large amounts of water, lifting the lower and upper lids occasionally. If irritation is present after washing, get medical attention. Contact lenses should not be wo when working with this product.

### ===SECTION VI - HEALTH HAZARD DATA CONT D===

### INHALATION:

ACUTE HEALTH HAZARDS: Overexposure to this product may cause nausea, irritation to the respiratory tract, fatigue, vomiting, marrow hypoplasia, and headache. Vapors may also cause eye and nasal irritation. Continued exposure at extremely high levels may cause staggering, unconsciousness, irregular heartbeat, and asphysiation.

CHRONIC HEALTH HAZARDS: Damage to the Central Nervous System, liver, kidney and respiratory system could result from chronic continual overexposure to this product.

EMERGENCY AND FIRST AID PROCEDURES: If a person breathes in large amounts of this product, move the exposed person to fresh air at once. If breathing has stopped, performantificial respiration. Keep the affected person warm and at rest. Get medical attention as soon as possible.

Carcinogenicity:

NTP?

IARC Monographs?

OSHA Regulated?

Yes: No:

Yes: XXX No:

Yes: No:XXXX

1985

Animals indefinite 20,515,79

Animal Positive 11,247,76

Medical Conditions Generally Aggravated by Exposure: <u>Impaired liver and renal functions</u>, cardiac disease, central nervous system, obstructive airway diseases, and pre-existing skin disorders.

### ===SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE===

Steps to be taken in case Material is Released or Spilled: <u>Ventilate area</u>. <u>Contain spill</u>. <u>Clean up area by wiping, mopping or absorption with an absorbent material</u>. <u>Transfer material to a metal container</u>. Avoid breathing vapors. Wear appropriate respirator and protective clothing.

Waste Disposal Method: Contaminated absorbent material or waste product must be disposed of i accordance with regulations in the Resource Conservation and Recovery Act and/or State, local or EPA regulations.

Precautions to be taken in Handling and Storing: Avoid contact with skin and avoid breathing vapors. Pipe vents outdoors. Store in cool, dry ventilated area. Vapors are heavier than air and will collect in low areas.

Other Precautions: No smoking in presence of vapors. Prevent moist air from entering storage area. Avoid prolonged contact with or storage in aluminum and its alloys. Contact with aluminum parts in a pressurizable fluid system may cause violent reactions.

### ===SECTION VIII - CONTROL MEASURES===

Respiratory Protection (Specify) Type: If exposure may or does exceed occupational exposure limits use a NIOSH/MSHA approved respirator to prevent overexposure. Use either a self-contained air supplied respirator or organic vapor respirator in accordance with 29 CFR 1910.134.

Ventilation:

Local Exhaust: Yes, generally required to reduce exposure to below OSHA allowable levels.

Mechanical (General): Not generally required if local exhaust ventilation is provided. If room air is not recirculated, but exhausted, may be adequate.

Special Exhaust: N/A

Other: Galvanized or Aluminum materials may be reactive with this product.

Protective Gloves: Employees should be provided with impervious gloves if direct skin contact is made with the product in a liquid state.

Eye Protection: Chemical Safety goggles, glasses or face shield (8" minimum) should be worn in a splash hazard is present. Contact lenses should not be worn when using this product.

Other Protective Clothing or Equipment: Impervious clothing should be worn to prevent repeate or prolonged skin contact with the product in a liquid state.

Special Work/Hygienic Practices: Wash hands with soap and water or a skin cleanser before eating, drinking, smoking, or using toilet facilities.

The following codes are being used:

N/A means: Not Applicable N/E means: Not Established

### REVISION OF: 06/23/86

SEA RAY BOATS INC ORDER NO: 640W16840 2600 SEARAY BLVD KNOXVILLE TN 37914 MCKESSON CHEMICAL COMPANY ONE POST STREET SAN FRANCISCO, CA 94104 ----EMERGENCY ASSISTANCE----FOR EMERGENCY ASSISTANCE INVOLVING CHEMICALS CALL CHEMTREC (800) 424-9300. ----FOR PRODUCT AND SALES INFORMATION-----CONTACT YOUR LOCAL MCKESSON CHEMICAL COMPANY SERVICE CENTER -----PRODUCT IDENTIFICATION-----PRODUCT NAME: ACETONE CAS NO.: 67-64-1 COMMON NAMES/SYNONYMS: ACETONE: MCKESSON CODE: T1018 2-PROPANONE AND TO SEE FORMULA: C3 H6 O DATE ISSUED: 06/86 SUPERCEDES: 02/86 HAZARD RATING (NFFA 704) HEALTH: 1 HAZARD RATING SCALE: FIRE: 3 0=MINIMAL 3=SERIOUS REACTIVITY: 0 1=SLIGHT 4=SEVERE SPECIAL: NONE 2=MODERATE -----HAZARDOUS INGREDIENTS-----EXPOSURE LIMITS, PPM OSHA ACGIH OTHER Z PEL TLV LIMIT COMPONENT HAZARD ACETONE \* **>99 1000 750** NONE FLAMMABLE; IRRITANT -----PHYSICAL/CHEMICAL CHARACTERISTICS----

REVISION OF: 06/23/86

BOILING POINT, DEG F: 133 VAPOR PRESSURE, MM HG/20 DEG C:184 MELTING POINT, DEG F: -142 VAPOR DENSITY (AIR=1):2.0° SPECIFIC GRAVITY (WATER=1): 0.79 WATER SOLUBILITY, %:100 APPEARANCE AND ODOR: CLEAR, EVAPORATION RATE (BUTYL ACETATE=1):14 COLORLESS LIQUID: SWEET ODOR

----FIRST AID MEASURES

IF INHALED: REMOVE TO FRESH AIR. GIVE ARTIFICIAL RESPIRATION IF NOT BREATHING. GET IMMEDIATE MEDICAL ATTENTION.

IN CASE OF EYE CONTACT: IMMEDIATELY FLUSH EYES WITH LOTS OF RUNNING WATER FOR 15 MINUTES, LIFTING THE UPPER AND LOWER EYELIDS OCCASIONALLY. GET IMMEDIATE MEDICAL ATTENTION.

IN CASE OF SKIN CONTACT: IMMEDIATELY WASH SKIN WITH LOTS OF SOAF AND WATER. REMOVE CONTAMINATED CLOTHING AND SHOES; WASH BEFORE REUSE. GET MEDICAL ATTENTION IF IRRITATION PERSISTS AFTER WASHING.

IF SWALLOWED: IF CONSCIOUS, IMMEDIATELY INDUCE VOMITING BY GIVING 2 GLASSES OF WATER AND STICKING A FINGER DOWN THE THROAT. GET IMMEDIATE MEDICAL ATTENTION. DO NOT GIVE ANYTHING TO AN UNCONSCIOUS OR CONVULSING PERSON.

-----HEALTH HAZARD INFORMATION--

PRIMARY ROUTES OF EXPOSURE: INHALATION, SKIN OR EYE CONTACT.

SIGNS AND SYMPTOMS OF EXPOSURE

INHALATION: PROLONGED OR REPEATED EXPOSURE OR BREATHING VERY HIGH CONCENTRATIONS MAY CAUSE HEADACHES, NAUSEA, VOMITING, DIZZINESS, OTHER CENTRAL NERVOUS SYSTEM EFFECTS, CONVULSIONS, AND IN EXTREME CASES, UNCONSCIOUSNESS AND DEATH.

EYE CONTACT: VAPORS WILL IRRITATE THE EYES. LIQUID AND MISTS WILL IRRITATE AND MAY BURN THE EYES.

SKIN CONTACT: BRIEF CONTACT MAY DRY THE SKIN. PROLONGED OR RE-PEATED CONTACT MAY IRRITATE THE SKIN, CAUSING DERMATITIS.

SWALLOWED: SWALLOWING LARGE QUANTITIES CAUSES HEADACHES, NAUSEA, VOMITING, AND FERHAPS UNCONSCIOUSNESS. CAN ALSO CAUSE LIVER AND KIDNEY

REVISION OF: 06/23/86

INJURY.

CHRONIC EFFECTS OF EXPOSURE: NO SPECIFIC INFORMATION AVAILABLE.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: PREEXISTING EYE OR SKIN DISORDERS MAY BE AGGRAVATED BY ACETONE EXPOSURE. ALSO, USE OF ALCOHOLIC BEVERAGES ENHANCES TOXIC EFFECTS.

TUTT TOXICITY DATA

ORAL: RAT LD50 = 9750 MG/KG

DERMAL: RABBIT LD50 = 20 G/KG

INHALATION: RAT LC50 = 16,000 FFM/4 HR

CARCINOGENICITY: THIS MATERIAL IS NOT CONSIDERED TO BE A CARCINOGEN BY THE NATIONAL TOXICOLOGY PROGRAM, THE INTERNATIONAL AGENCY FOR RESEARCH ON CANCER, OR THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION

OTHER DATA: INHALATION HUMAN TCLO = 500 FFM (EYE)

-----PERSONAL PROTECTION-----

VENTILATION: LOCAL MECHANICAL EXHAUST VENTILATION CAPABLE OF MAIN-TAINING EMISSIONS AT THE POINT OF USE BELOW THE PEL.

RESPIRATORY PROTECTION: IF USE CONDITIONS GENERATE VAPORS OR MISTS, WEAR A NIOSH-APPROVED RESPIRATOR APPROPRIATE FOR THOSE EMISSION LEVELS. APPROPRIATE RESPIRATORS MAY BE A FULL FACEPIECE OR A HALF MASK AIR-PURIFYING CARTRIDGE RESPIRATOR EQUIPPED FOR ORGANIC VAPORS/MISTS, A SELF-CONTAINED BREATHING APPARATUS IN THE PRESSURE DEMAND MODE, OR A SUPPLIED-AIR RESPIRATOR.

EYE PROTECTION: CHEMICAL GOGGLES UNLESS A FULL FACEPIECE RESPIRATOR IS ALSO WORN. IT IS GENERALLY RECOGNIZED THAT CONTACT LENSES SHOULD NOT BE WORN WHEN WORKING WITH CHEMICALS BECAUSE CONTACT LENSES MAY CONTRIBUTE TO THE SEVERITY OF AN EYE INJURY.

PROTECTIVE CLOTHING: LONG-SLEEVED SHIRT, TROUSERS, SAFETY SHOES, RUBBER GLOVES, AND RUBBER APRON.

REVISION OF: 06/23/86

OTHER PROTECTIVE MEASURES: AN EYEWASH AND SAFETY SHOWER SHOULD BE NEARBY AND READY FOR USF.

-----FIRE AND EXPLOSION INFORMATION-----

FLASH POINT, DEG F: 0 FLAMMABLE LIMITS IN AIR, % METHOD USED: TCC LOWER: 2 UPPER:13 EXTINGUISHING MEDIA: USE WATER SPRAY, DRY CHEMICAL, CO2, OR ALCOHOL FOAM.

SPECIAL FIRE FIGHTING PROCEDURES: FIRE FIGHTERS SHOULD WEAR SELF-CONTAINED BREATHING APPARATUS AND FULL PROTECTIVE CLOTHING. USE WATER SPRAY TO COOL NEARBY CONTAINERS AND STRUCTURES EXPOSED TO FIRE.

UNUSUAL FIRE AND EXPLOSION HAZARDS: ACETONE IS EXTREMELY FLAMMABLE. EXTINGUISH ALL NEARBY SOURCES OF IGNITION. AVOID ACCUMULATION OF WATER OR ACETONE VAPORS BECAUSE AQUEOUS SOLUTIONS CONTAINING MORE THAN 2.5% ACETONE ARE FLAMMABLE.

------HAZARDOUS REACTIVITY------

STABILITY: STABLE FOLYMERIZATION: WILL NOT OCCUR CONDITIONS TO AVOID: HEAT, SPARKS, AND OPEN FLAMES.

MATERIALS TO AVOID: ACIDS, OXIDIZING MATERIALS, POTASSIUM T-BUTOXIDE, ALKALIS, AMINES, ALKANOLAMINES, AMMONIA, ALDEHYDES, AND CHLORINATED COMPOUNDS.

HAZARDOUS DECOMPOSITION PRODUCTS: MAY LIBERATE CARBON MONOXIDE, CARBON DIOXIDE, AND UNIDENTIFIED ORGANIC COMPOUNDS IN BLACK SMOKE.

-----SPILL, LEAK, AND DISPOSAL PROCEDURES-----

ACTION TO TAKE FOR SPILLS OR LEAKS: WEAR PROTECTIVE EQUIPMENT INCLUDING RUBBER BOOTS, RUBBER GLOVES, RUBBER APRON, AND A SELF-CONTAINED BREATHING APPARATUS IN THE PRESSURE DEMAND MODE OR A SUPPLIED-AIR RESPIRATOR. IF THE SPILL OR LEAK IS SMALL, A FULL FACEPIECE AIR-PURIFYING CARTRIDGE RESPIRATOR EQUIPPED FOR ORGANIC VAPORS MAY BE SATISFACTORY. IN ANY EVENT, ALWAYS WEAR EYE PROTECTION. EXTINGUISH ALL IGNITION SOURCES AND ENSURE THAT ALL HANDLING EQUIPMENT IS ELECTRICALLY GROUNDED. FOR SMALL SPILLS OR DRIPS, MOP OR WIPE UP AND DISPOSE OF IN DOT-APPROVED WASTE CONTAINERS. FOR LARGE SPILLS, CONTAIN BY DIKING WITH SOIL OR

REVISION OF: 06/23/86

OTHER NON-COMBUSTIBLE ABSORBENT MATERIALS AND THEN PUMP INTO DOT-AFPROVED WASTE CONTAINERS; OR ABSORB WITH NON-COMBUSTIBLE SORBENT MATERIAL, PLACE RESIDUE IN DOT-APPROVED WASTE CONTAINERS. KEEP OUT OF SEWERS, STORM DRAINS, SURFACE WATERS, AND SOIL. COMPLY WITH ALL APPLICABLE GOVERNMENTAL REGULATIONS ON SPILL REPORTING, AND HANDLING AND DISPOSAL OF WASTE.

DISPOSAL METHODS: DISPOSE OF CONTAMINATED PRODUCT AND MATERIALS USED IN CLEANING UP SPILLS OR LEAKS IN A MANNER APPROVED FOR THIS MATERIAL. CONSULT APPROPRIATE FEDERAL, STATE AND LOCAL REGULATORY AGENCIES TO ASCERTAIN PROPER DISPOSAL PROCEDURES.

NOTE: EMPTY CONTAINERS CAN HAVE RESIDUES, GASES AND MISTS AND ARE SUBJECT TO PROPER WASTE DISPOSAL, AS ABOVE.

-----SPECIAL PRECAUTIONS

HANDLING AND STORAGE PRECAUTIONS: KEEP AWAY FROM HEAT, SPARKS, AND FLAMES. STORE IN A COOL, DRY, WELL-VENTILATED PLACE AWAY FROM INCOMPATIBLE MATERIALS. VENT CONTAINER FREQUENTLY, AND MORE OFTEN IN WARM WEATHER, TO RELIEVE PRESSURE. ELECTRICALLY GROUND ALL EQUIPMENT WHEN HANDLING THIS PRODUCT AND USE ONLY NON-SPARKING TOOLS. KEEP CONTAINER TIGHTLY CLOSED WHEN NOT IN USE. DO NOT USE PRESSURE TO EMPTY CONTAINER. WASH THOROUGHLY AFTER HANDLING. DO NOT GET IN EYES, ON SKIN, OR ON CLOTHING.

REPAIR AND MAINTENANCE PRECAUTIONS: DO NOT CUT, GRIND, WELD, OR DRILL ON OR NEAR THIS CONTAINER.

我以后感到我的一点,是是这个人的,是这一一大手,只见一个人,就是谁的的人的 矮 网络克拉克斯特拉

OTHER PRECAUTIONS: CONTAINERS, EVEN THOSE THAT HAVE BEEN EMPTIED, WILL RETAIN PRODUCT RESIDUE AND VAPORS. ALWAYS OBEY HAZARD WARNINGS AND HANDLE EMPTY CONTAINERS AS IF THEY WERE FULL.

------FOR ADDITIONAL INFORMATION-------

CONTACT DOUGLAS EISNER, TECHNICAL DIRECTOR, MCKESSON CHEMICAL COMPANY, DURING BUSINESS HOURS, PACIFIC TIME (415)983-9214.

----NOTICE----

ALL INFORMATION, RECOMMENDATIONS, AND SUGGESTIONS APPEARING HEREIN CONCERNING THIS PRODUCT ARE BASED UPON DATA OBTAINED FROM THE MANUFACTURER AND/OR RECOGNIZED TECHNICAL SOURCES; HOWEVER, MCKESSON

REVISION OF: 06/23/86

CHEMICAL COMPANY ("MCC") MAKES NO WARRANTY, REPRESENTATION OR GUARANTY AS TO THE ACCURACY, SUFFICIENCY OR COMPLETENESS OF THE MATERIAL SET FORTH HEREIN. IT IS THE USER'S RESPONSIBILITY TO DETERMINE THE SAFETY. TOXICITY AND SUITABILITY OF HIS OWN USE, HANDLING AND DISPOSAL OF THE PRODUCT. ADDITIONAL PRODUCT LITERATURE MAY BE AVAILABLE UPON REQUEST. SINCE ACTUAL USE BY OTHERS IS BEYOND OUR CONTROL, NO WARRANTY, EXPRESS OR IMPLIED, IS MADE BY MCC AS TO THE EFFECTS OF SUCH USE, THE RESULTS TO BE OBTAINED OR THE SAFETY AND TOXICITY OF THE PRODUCT, NOR DOES MCC ASSUME ANY LIABILITY ARISING OUT OF USE BY OTHERS OF THE PRODUCT REFERRED TO HEREIN. THE DATA IN THIS MSDS RELATE ONLY TO THE SPECIFIC MATERIAL DESIGNATED HEREIN AND DO NOT RELATE TO USE IN COMBINATION WITH ANY OTHER MATERIAL OR IN ANY PROCESS!

REVISION 0000002

06/86: ADDED HAZARD INFORMATION TO INHALATION, SWALLOWING, AND MEDICAL CONDITIONS SECTIONS. ADDED INHALATION TOXICITY DATA AND CORRECTED "OTHER" TOXICITY DATA. REVISED RESPIRATORY AND EYE PROTECTION. REVISED FIRE AND EXPLOSION INFORMATION SECTION. ADDED MATERIALS TO AVOID AND REVISED SPILL/LEAK PROCEDURES AND HANDLING ADVICE.

\*\*\*\*\*

END OF MSDS

\*\*\*\*\*\*

### **Best Available Copy**

. بهزر

Occupational Salary and Health Administration

Bergen Parist

MATERIAL SAFETY DATA SHEET

Required under USDL Safety and Health Regulations for Ship Repairing,
Shipbuilding, and Shipbreaking (29 CFR 1915, 1916, 1917)

			197 197 1
•	The state of the s	SECTION	
MANUFACTURER'S	COATINGS, INC.	EMERGENCY TEL 813-536-3	
ADDRESS (Number,	Sireet, City, State, and ZIP Code)	Road, Largo, Fl. 33543	
ANTI-FOUL	ING PAINT	SEA HAWK OMP-II	
CHEMICAL FAMILY		FORMULA	

•	SECTION	11 -	HAZAF	RDOUS INGREDIENTS		
PAINTS, PRESER	VATIVES, & SOLVENTS	×	TLV (Units)	ALLOYS AND METALLIC COATINGS	×	TLV (Unit)
PIGMENTS Tr1-0	outyl tin fluoride	4.		DASE METAL		
CATALYST		7	11 1	ALLOYS	•	
VEHICLE Tribut	yl tin pacrylate 19	. 8		METALLIC COATINGS		
SOLVENTS AFOMB	- 1	2.9	100	FILLER METAL PLUS COATING OR CORE FLUX		17 40
ADDITIVES			ppm.	OTHERS		
OTHERS						
•	HAZARDOUS MIXTURES	OF C	THER LIC	OUIDS, SOLIDS, OR GASES	*	TLV (Unin)
		•				
••						
•						

SECT	ION III - P	HYSICAL DATA	
BOILING POINT (°F.)		SPECIFIC GRAVITY (H20-1)	1.38
VAPOR PRESSURE (mm Hq.)		PERCENT, VOLATILE BY VOLUME (%)	60_
VAPOR DENSITY (AIR-1) Geater than	1	evaporation rate n. Dutyl acquate	0.19
SOLUBILITY IN WATER	slight		
APPEARANCE AND ODOR Liquid.	Odor of	Xylol.	
•	· · · · · · · · · · · · · · · · · · ·		

SECTION IV - FIRE AND EX	KPLOSION HAZARD DATA	7. 2
FLASH POINT (Melhod UHd) 790 F TCC	FLAMMAGLE LIMITS LI UII	<del></del>
extinguishing media Water spray, CO2. Foam	dry chemical	
SPECIAL FIRE FIGHTING PROCEDURES	s should be equipped with	
self contained breat		v:
UNUSUAL FIRE AND EVELOCION MATAGOR	if exposed to heat, sparks,	
	flame.	

	No.
SECTION V - HEALTH HAZARD DATA	14.
THRESHOLD LIMIT VALUE Organotin compounds - 0.1mg. Sn/M3	
Causes severe damage to eyes and skin. Toxic by ingestion. Fumes	3
are irritating to upper respiratory tract.	t.
In case of eye contact, flush with flowing water at least 15 mir	ıute
and get immediate medical attention. Remove contaminated clothin	
Skin: Flush with water and wash with soap & water. Inhalation:	iove
exposed individual to Iresh air.	· · · · ·
- SECTION VI - REACTIVITY DATA	
UNSTABLE CONDITIONS TO AVOID	•
STABLE X Exposure to heat, sparks and fire.	
Strong oxidizing agents	7 th 1
HAZARDOUS DECOMPOSITION PRODUCTS	3
HAZARDOUS MAY OCCUR	
WILL NOT OCCUR X	· · · · · ·
<u> </u>	** <u> </u>
SECTION VII - SPILL OR LEAK PROCEDURES	5 1 24
Eliminate all ignition sources. Absorb spills with sand or other	-
inert material, using non-sparking tools. Place in suitable	<u> </u>
containers for disposal.	Ť
Incinerate or dispose of as solid waste. Follow all	: :
applicable regulations for polution control.	
	• •
SECTION VIII - SPECIAL PROTECTION INFORMATION	
	····
Use NIOSH approved respirator if airborn concentration exceeds TLV	7
Required Required	
MECHANICAL (General) Required	<u> </u>
Required EYE PROTECTION Chemical workers goggles	
Emerency eye-wash	
SECTION IX - SPECIAL PRECAUTIONS	
Avola all skin and eye contact. Provide adequate ventilation,;	. !

470 134-116

Do not breathe fumes. Launder contaminated clothing before re-us.

Store in area suitable for flammable metarials

OTHER PRECAUTIONS

••

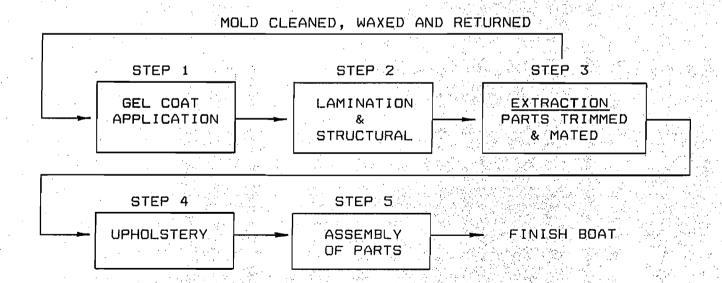
21

### EXHIBIT "B"

Sea Ray Boats, INC at the Sykes Creek Facility shall be in the business of manufacturing fiberglass pleasure boats.

The process is generally described as follows:

- <u>Step 1</u>. Gel coat (the exterior colors) are sprayed into a mold by an airless method. Gel Coat is described in the attached Material Safety Data Sheets titled Exhibit A.
- Step 2. Structural resin and fiberglass is again sprayed by an airless method into the mold over the Gel Coat and wooden and foam parts are added for rigidity. Resin is described in the attached Material Safety Data Sheets titled Exhibit A.
- Step 3. After the lamination (resin applications) process the hull and deck parts plus any miscellaneous small parts are extracted from their molds and are trimmed of excess or overspray. (Molds are cleaned, waxed and returned to Step 1).
- Step 4. Glue is utilized in the preparation of upholstered ? parts, which are also used in the final assembly process.
- Step 5. The boat assembly process utilizes the fiberglass parts, the exposed wooden parts and other materials and parts which come to the site in a ready to use condition (i.e. they are not manufactured on site).



### CHEMISTRY

Polyester resin is a chemical chain containing organic acids and alcohols with an ester linkage (hence the name, polyester).

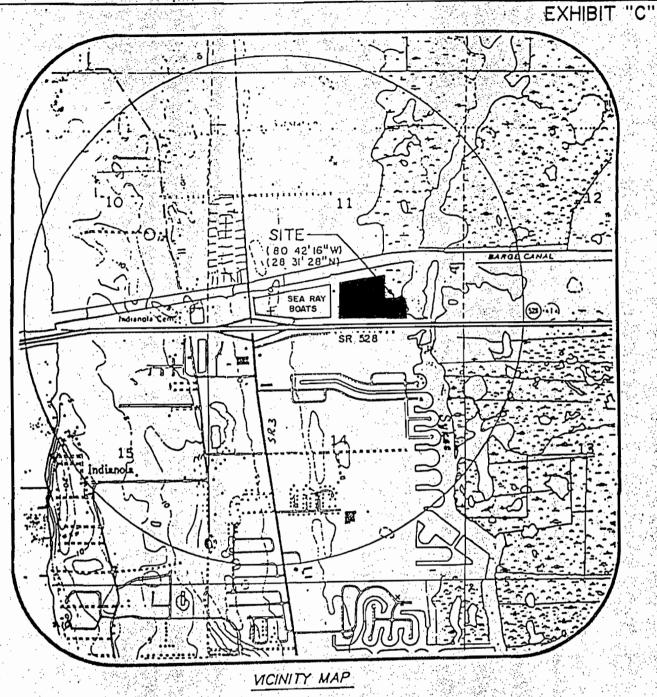
Styrene is the most commonly used crosslinking agent that connects the polyester chains and creates a polyester resin which is liquid and flexible for the fabrication of parts.

Styrene, as a crosslinking agent, reacts with the available bond sites on the polyester chain, usually the unsaturated organic acid.

When the resin arrives at the plant it is in a liquid form: a polyester thinned with 30 to 45% styrene monomer and mixed with inhibitors to prevent a spontaneous cross-linking reaction.

Catalysts, promoters and temperature control the rate of cross-linking or reaction. <u>Methyl Ethyl Ketone Peroxide</u> is the catalyst used and is normally a 1% addition.

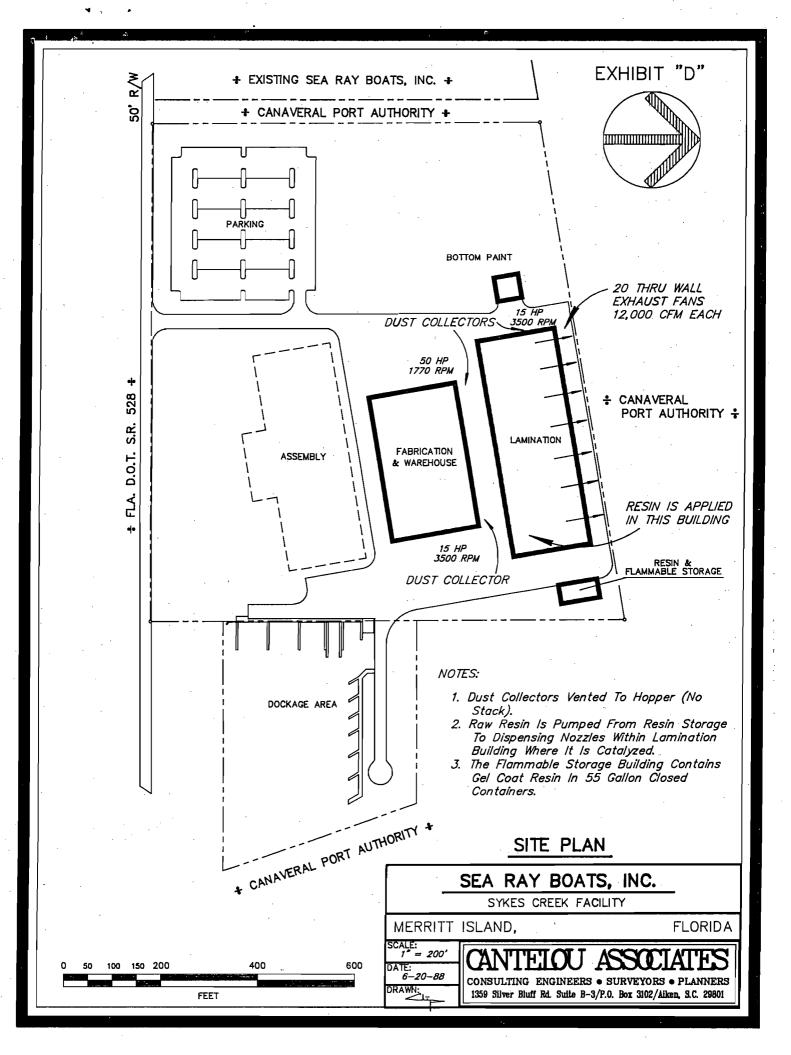
Acetone is used sparingly as a solvent to clean equipment after application of the resin.



1" = 2000"

### ADJACENT PROPERTY OWNERS:

- 1. CANAVERAL PORT AUTHORITY P.O. BOX 267 CAPE CANAVERAL FL 32920
- 2. FLORIDA DEPARTMENT OF TRANSPORTATION



## CASE HISTORY SHEET

	File Name Sea Ray Semination & assent  PATS Number ACOS-151435 Permit Number	ly	,	
	PATS Number ACOS - 151435 Permit Number_	<u> </u>		
	·			
Date		Init.	Time	Miles
ENTERE	D JUN 3 0 1988	A-	,26	
	•			
			,	
				-
				<u> </u>
		· · · · · · · · · · · · · · · · · · ·		
				*
		<del></del>		
				<b></b>
-				
		<del> </del>		
		<b></b>		
		<del></del>		
	To	tal:		



June 28, 1988

State of Florida
Department of Environmental Regulation
Central Florida District
3319 Maguire Boulevard
Orlando, Florida 32803-3767



Gentlemen:

Please be advised that G. E. Cantelou, Jr., a professional engineer, is serving as a consultant to our Company in matters attendant to our new manufacturing plant to be located in Merritt Island, Florida and will be filing with your offices as our representative an Application To Operate/Construct Air Pollution Sources seeking a construction permit with respect to such facility.

Very truly yours,

SEA RAY BOATS, INC.

John A. Cronkhite Senior Vice President/

General Counsel

JAC:cbh

# USAGE LOG

WEEK E	AIDINO.	
MCCK C	:NUING:	

MONDAY		(1)	(2)	(3)	(4)	(5)	(6)
DESCRIPTION		DENSITY	VOC FACTOR	TIME FACTOR	AMOUNTS USED	TOTAL VOC EMISSIONS $(5) = (1)X(2)X(4)/2000$	HOURLY VOC EMISSIONS $(6) = (1)X(2)X(4)/(3)$
PRODUCT	COMPONENT	#/GAL	% BY WT	HRS/DAY	(GALS)	(TONS)	(#/HR)
RESIN	STYRENE	9.15	8	16			
GEL COAT	STYRENE	10.7	8	16			
GEL COAT	METHYL METHACRALATE	10.7	8	16			
MEKP	MEKP	8.0	10	16			
ADHESIVE	1,1,1-TRICHLORETHANE	10.5	66	16			
ACETONE	ACETONE	6.1	50	16			
BOTTOM PAINT	BOTTOM PAINT	11.4	6D	16			

TOTAL	DAILY	<b>EMISSIONS</b>		

TUESDAY		(1)	(2)	(3)	(4)	(5)	(6)
DESCRIPTION		DENSITY	VOC FACTOR	TIME FACTOR	AMOUNTS USED	TOTAL VOC EMISSIONS $(5) = (1)X(2)X(4)/2000$	HOURLY VOC EMISSIONS $(6) = (1)X(2)X(4)/(3)$
PRODUCT	COMPONENT	#/GAL	% BY WT	HRS/DAY	(GALS)	(TONS)	(#/HR)
RESIN	STYRENE	9.15	8	16			
GEL COAT	STYRENE METHYL METHACRALATE	10.7	8	16 16			
MEKP	MEKP	8.0	10	16			
ADHESIVE	1,1,1-TRICHLORETHANE	10.5	66	16			
ACETONE	ACETONE	6.1	50	16			
BOTTOM PAINT	BOTTOM PAINT	11.4	60	16			

TOTAL.	DAILY	EMISSIONS	

WEDNESDAY		(1)	(2)	(3)	(4)	(5)	(6)
DESCRIPTION		DENSITY	VOC FACTOR	TIME FACTOR	AMOUNTS USED	TOTAL VOC EMISSIONS $(5) = (1)X(2)X(4)/2000$	HOURLY VOC EMISSIONS $(6) = (1)X(2)X(4)/(3)$
PRODUCT	COMPONENT	#/GAL	% BY WT	HRS/DAY	(GALS)	(TONS)	(#/HR)
RESIN	STYRENE	9.15	8	16			
GEL COAT	STYRENE	10.7	8	16		•	
OLL COAT	METHYL METHACRALATE	10.7	8	16			• • • • • • • • • • • • • • • • • • • •
MEKP	MEKP	8.0	10	16		• .	· .
ADHESIVE	1,1,1-TRICHLORETHANE	10.5	66	16			
ACETONE	ACETONE	6.1	50	16			•
BOTTOM PAINT	BOTTOM PAINT	11.4	60	16			

### TOTAL DAILY EMISSIONS \_\_\_\_\_

THURSDAY		(1)	(2)	(3)	(4)	(5)	(6)
DESCRIPTION	·	DENSITY	VOC FACTOR	TIME FACTOR	AMOUNTS USED	TOTAL VOC EMISSIONS $(5) = (1)X(2)X(4)/2000$	HOURLY VOC EMISSIONS $(6) = (1)X(2)X(4)/(3)$
PRODUCT	COMPONENT	#/GAL	% BY WT	HRS/DAY	(GALS)	(TONS)	(#/HR)
RESIN	STYRENE	9.15	8	16			
GEL COAT	STYRENE	10.7	8	16			
GET COVI	METHYL METHACRALATE	10.7	8	16		:	•
MEKP	MEKP	8.0	10	16			•
ADHESIVE	1,1,1-TRICHLORETHANE	10.5	66	16			
ACETONE	ACETONE	6.1	50	16			
BOTTOM PAINT	BOTTOM PAINT	- 11.4	60	16			

TOTAL DAILY EMISSIONS \_\_\_\_\_

FRIDAY		(1)	(2)	(3)	(4)	(5)	(6)
DESCRIPTION		DENSITY	VOC FACTOR	TIME FACTOR	AMOUNTS USED	TOTAL VOC EMISSIONS (5) = $(1)X(2)X(4)/2000$	HOURLY VOC EMISSIONS (6) = (1)X(2)X(4)/(3)
PRODUCT	COMPONENT	#/GAL	% BY WT	HRS/DAY	(GALS)	(TONS)	(#/HR)
RESIN	STYRENE	9.15	8	16			
GEL COAT	STYRENE	10.7	8	16			, .
	METHYL METHACRALATE	10.7	8	16			· .
MEKP	MEKP	8.0	10	16			* * * * * * * * * * * * * * * * * * *
ADHESIVE	1,1,1-TRICHLORETHANE	10.5	66	16			
ACETONE	ACETONE	6.1	50	16			
BOTTOM PAINT	BOTTOM PAINT	11.4	60	16			

TOTAL DAILY	EMISSIONS	
-------------	-----------	--

TOTAL	WEEKLY	EMISSIONS	