SHIP PRODUCTION COMMITTEE FACILITIES AND ENVIRONMENTAL EFFECTS SURFACE PREPARATION AND COATINGS DESIGN/PRODUCTION INTEGRATION HUMAN RESOURCE INNOVATION MARINE INDUSTRY STANDARDS WELDING INDUSTRIAL ENGINEERING EDUCATION AND TRAINING

THE NATIONAL SHIPBUILDING RESEARCH PROGRAM

Toxic Release Inventory Phase II

U.S. DEPARTMENT OF THE NAVY CARDEROCK DIVISION, NAVAL SURFACE WARFARE CENTER

in cooperation with National Steel and Shipbuilding Company San Diego, California

October 1996 NSRP 0482

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FINAL REPORT

TOXIC RELEASE INVENTORY PHASE II

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For

NATIONAL STEEL AND SHIPBUILDING COMPANY Harbor Drive and 28th Street Post Office Box 85278 San Diego, CA 92186-5278

In Behalf Of SNAME SPC PANEL SP-1

FACILITIES AND ENVIRONMENTAL EFFECTS

Under the NATIONAL SHIPBUILDING RESEARCH PROGRAM

October 1996

Task #I-92-2 Subtask 13

INTRODUCTION

This document is Phase II of the audit of shipyard Toxic Release Inventory ("TRI") report forms ("Form R"), submitted pursuant to Section 313 of the Emergency Planning and Community Rightto-Know Act ("EPCRA"). The purpose of Phase II of the audit was (1) to compare the TRI data for 1993 and 1994; (2) to develop a comprehensive study to identify the use of inconsistent assumptions or methods of calculation for determining thresholds and reportable releases; and (3) to identify companies to undergo further study in order to identify the causes of the inconsistencies.

This report includes the following:

An analysis of the 1994 Toxic Release Inventory (TRI) reporting data;

A comparison of that data with the 1993 data;

A comprehensive study to be carried out in Phase III of this project

An identification of those reporting companies which demonstrate common and unique reporting inconsistencies warranting further study.

TABLE OF CONTENTS

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F2	age
COMPARISON OF 1993/1994 TRI DATA	1
COMPREHENSIVE SURVEY	2
COMPANIES IDENTIFIED FOR FURTHER STUDY	9

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SECTION A: 1993 FORM R 313 DATA

SECTION B: 1994 FORM R 313 DATA

AUDIT OF SHIPYARD TRI REPORTING

We have completed Phase II of the audit of shipyard Toxic Release Inventory ("TRI") reporting forms ("Form R'), pursuant to Section 313 of the Emergency Planning and Community Right-to-Know Act ("EPCRA"). Phase II involved: (1) gathering, compiling and analyzing 1994 TRI reporting data, comparing the 1993 TRI reporting data with the 1994 TRI reporting data; (2) developing a comprehensive study plan designed to ascertain reporting assumptions and calculation methods as the basis for identifying reporting inconsistencies; and (3) identifying reporting companies with common and unique reporting inconsistencies warranting further study in Phase III of this project.

COMPARISON OF 1993/1994 TRI DATA

The first part of Phase II of the audit involved analyzing and comparing the 1993 TRI data with the newly obtained 1994 TRI data. Spreadsheet comparisons of the 1993 and 1994 reports of release, recycling and disposal activity using all shipyard Forms R (attached at tabs A and B respectively) revealed significant improvements in reporting consistency. However, many of the same reporting inconsistencies were identified. The following reporting inconsistencies and anomalies were found in the 1994 data

- 1. Diversity in the quantities reported for releases, recycling, treatment, etc. that seems to exceed differences in the level of production;
- 2. Diversity in the specificity of reporting -- one or two significant digits versus several;
- 3. Diversity in the treatments to which similar materials sent off-site are subject (energy recovery, recycling and treatment);
- 4. Diversity in reporting off-site transfers (Some companies are including offsite transfers in total quantity released.);
- 5. Diversity in the percentage of material reported as recovered, recycled or treated;
- 6. Diversity in approaches in reporting discharges to bodies of water and POTWs. (Some companies may include discharges to POTWs as discharges to bodies of water.);
- 7. Companies are reporting treatment of chemicals (metals) in a way that conflicts with EPA policy and/or the Form R definitions;
- 8. Companies are reporting significant amounts of off-site transfers with no accounting for their disposition,

- 9. Companies are reporting varying dispositions of the same chemical, which could reflect different interpretations of the definitions;
- 10. Certain chemicals were reported by only one company; and
- 11. No companies apparently reported any one time releases. This implies that no company ever spilled any Form R chemicals.

COMPREHENSIVE SURVEY

Using what we learned from analyzing and comparing the 1993 and 1994 data, we developed a comprehensive study plan designed to pinpoint the assumptions and calculation methods used by the reporting companies. The study, which will be carried out in Phase III of this project, is designed to identify the cause of the reporting inconsistencies as a means to develop a uniform set of assumptions and instructions to prevent future reporting inconsistency. The following is an outline of specific reporting inconsistencies identified in the 1994 TRI reported data which will be the roadmap for the study to be conducted in Phase 111 of this project:

GENERAL ISSUES

- A. Many companies report smaller quantities transferred off-site than the amount reported as recovered through off-site energy recovery, recycling, or treatment.
 - 1. What is the source of the additional material reported as recycled, recovered or treated off-site?
 - 2. Are there intra-company transfers of materials that are not reported on the Form R?
- B. The 1994 data clearly indicates a great disparity in amounts of chemicals reported among the various reporting companies.
 - 1. Determine the cause of the diversity in amounts reported.
 - 2. Are the differences in the reported amounts typographical errors, calculation errors, etc.
- c. The following chemicals were reported by only one reporting company: ethoxyethanol; barium; barium compounds; benzene; carbon tetrachloride; chlorine; cumene; dichlorotetrafluroethane; glycol ethers; methyl tert-butyl ether; methylenebis; molybdenum trioxide; trichloroethylene; vinyl acetate.

- 1. How are threshold determinations made for these chemicals?
- 2. Are there process differences that would account for these differences?
- D. The following chemicals were reported in the 1993 data but are not reported in the 1994 data: acrylonitrile; ammonia; hydrochloric acid; naphthalene.
 - 1. Are companies no longer using these chemicals?
 - 2. How are threshold determinations being made?
- E. The following chemicals appeared for the first time in the 1994 data and were not reported in the 1993 data: barium; carbon tetrachloride; cumene; molybdenum trioxide; vinyl acetate.
 - 1. Are these chemicals newly emitted?
- F. Diversity in the quantities reported for releases, recycling, treatment, etc. that seem to exceed differences in the level of production;
 - 1. Determine cause of diversity -- eliminate typographical errors as cause of diversity in reporting amounts.
- G. Diversity in the specificity of reporting -- one or two significant digits versus several.
 - 1. EPA instructions only require reports of two significant digits.
- H. Diversity in the treatments to which similar materials sent off-site are subject.
 - 1. Are reporting companies properly characterizing treatments to which chemicals are subject off-site?
- 1. Diversity in reporting off-site transfers.
 - 1. Are reporting companies including off-site transfers in total quantity released?
- J. Diversity in the percentage of material reported as recovered, recycled or treated.
 - 1. What amounts of the reported chemicals are actually recovered, recycled and/or treated?
- K. Diversity in approaches in reporting discharges to bodies of water and POTWS.

- 1. Are companies including discharges to POTWs as discharges to bodies of water?
- L. Companies are reporting treatment of chemicals (metals) in a way that conflicts with EPA policy and/or the Form R definitions.
 - 1. Are companies reporting metals as being treated, when in fact they are either recycled or disposed?
 - 2. How do companies report for the chemicals as opposed to the wastestream containing the chemicals?
- M. Companies are reporting significant amounts of off-site transfers with no accounting for their disposition.
 - 1. What accounts for the difference in the amounts transferred off-site if not released or disposed?
- N. Companies are reporting varying dispositions of the same chemical, which could reflect different interpretations of the definitions.
 - 1. What are the various interpretations of the terms treatment, recycling and recovery?
 - 2. What emission factors are being used to calculate releases?
- 0. Did any company experience a spill or release of any Form R chemicals?

CHEMICAL SPECIFIC ISSUES

- P. 1,1,1-Trichloroethane reporting companies report varied dispositions of this chemical.
 - 1. Are the varying dispositions of this chemical properly characterized for purposes of Form R?
- Q. 1,2-Dichloroethane The two reporting companies report identical nonpoint source air emissions. However, one company (Platzer) reports significant stack or point source air emissions while the other (Newpark) reports only a small amount.
 - 1. What accounts for the difference in stack or point source air emissions?

- R. Trimethylbenzene consistent reporting of non-point source air emissions. Each company also reports off-site energy recovery. However, one company reports a small amount of off-site treatment and another company reports a small amount of on-site recycling.
 - 1. Are off-site treatment and on-site recycling properly characterized and reported?
- S. Barium (only one reporting company (Brown & Root)) shows amounts transferred off-site.
 - 1. What disposition is being made of the amounts transferred off-site?
- T. Chlorine (only one reporting company (Ingalls)) shows no amount transferred off-site but 430 lbs/yr of off-site treatment.
 - 1. Where is the chemical treated off-site coming from?
- u. Chromium (one reporting company (Bath Iron Works)) reports significant on-site recycling of chromium.
 - 1. Is the on-site recycling of chromium properly characterized and reported?
- v. Chromium Compounds Avondale reports more off-site recycling than quantity transferred off-site. Newport reports more off-site treatment than quantity transformed off-site. McDermott reports only non-point source air emissions of chromium compounds.
 - 1. How can off-site recycling/treatment exceed the amount transferred off-site?
 - 2. (McDermott) Are there other dispositions of the chromium compounds?
- w. Copper One company reports off-site recycling in excess of amounts transferred off-site. Only one company reports on-site recycling.
 - 1. How is the balance of the amount transferred off-site being handled?
 - 2. Is on-site recycling properly characterized and reported?

- x. Copper Compounds only one of the 13 reporting companies (Todd Pacific) reports stack air emissions -- and reports stack air emissions equal to non-point source air emissions. one company (U.S. Navy) reports equal amounts of discharges to streams or bodies of water and discharges to POTW.
 - 1. Are the same emissions being double counted?
- Y. DiChloromethane (U.S. Navy) off-site transfers are less than off-site treatment.
 - 1. What accounts for the difference between the amount transferred off-site and off-site treatment?
- z. Ethylene Glycol Platzer reports identical amounts of point and nonpoint source air emissions.
 - 1. What is the basis for the release estimate?
- AA. Lead Compounds The three reporting companies report identical non point-source air emissions. One of the three reporting companies reports no discharges to bodies of water. One company reports off-site energy recovery.
 - 1. Are the other two reporting companies failing to report discharges to bodies of water?
 - 2. Is off-site energy recovery properly characterized and reported?
- AB. Manganese Compounds One of the five reporting companies (Newport News) reports identical amounts of non-point source air emissions, discharges to streams or bodies of water, releases to on-site landfills.
 - 1. Verify that this is not a typographical error.
- AC. Methanol Each of the three reporting companies reports different dispositions -- off-site energy recovery, off-site recycling, on-site treatment, off-site treatment.
 - 1. Determine whether the dispositions are properly characterized and reported.

- AD. MethylEthylKetone One of the five reporting companies (Halter) reports on-site recycling.
 - 1. Determine whether on-site recycling is properly characterized and reported.
- AE. Methyl Isobutyl Ketone One of the four reporting companies (Platzer) reports point-source air emissions in addition to non-point source air emissions. One of the four reporting companies (Platzer) reports on and off-site treatment.
 - 1. Determine whether point-source air emissions are properly characterized and reported.
 - 2. Determine whether on and off-site treatment are properly characterized and reported.
- AF. N-Butyl Alcohol One of the 20 reporting companies reports stack or point source emissions. Companies consistently report off-site energy recovery. Other dispositions vary greatly (4 report on-site recycling, one reports a large amount of off-site recycling, one reports a small amount of on-site treatment, four report significant amounts of off-site treatment.
 - 1. Determine whether stack or point-source air emissions are properly characterized and reported.
 - 2. Determine whether varying dispositions are properly characterized and reported.
- AG. Nickel Two of five companies report discharges to streams or bodies of water. One (Ingalls) does not report off-site recycling. One (Bath) reports on-site recycling.
 - 1. Determine whether varying dispositions are properly characterized and reported.
- AH. Nickel Compounds One company (Newport News) reports very large non-point source air emissions and off-site treatment.

- 1. Determine whether these dispositions are properly characterized and reported.
- Al. Styrene One (Newpark) of eight reports discharges to streams or bodies of water. Varied dispositions include off-site energy recovery, off-site recycling, on and off-site treatment.
 - 1. Determine whether these dispositions are properly characterized and reported.
- AJ. Toluene Two (Bollinger and U.S. Navy) do not report offsite energy recovery. dispositions vary greatly -- on and off-site recycling and treatment.
 - 1. Determine whether these dispositions are properly characterized and reported.
- AK. Xylene Four of 37 report stack or point source air emissions. Two (Cascade and Newpark) report discharges to streams or bodies of water. One (Cascade) reports releases to on-site landfill. Varied dispositions -- all but 10 report off-site energy recovery. varied on and off-site recycling and treatment.
 - 1. Determine whether these dispositions are properly characterized and reported.
- AL. Zinc compounds One (Atlantic Marine) reports very large stack or point source emissions. Varied dispositions. One reports off-site recycling.
 - 1. Determine whether these dispositions are properly characterized and reported.

AM. ZincOne (National Steel) of seven companies reports
small amounts of on and off-site treatment.

1. Determine whether on and off-site treatment are properly characterized and reported.

COMPANIES IDENTIFIED FOR FURTHER STUDY

After reviewing all of the 1993 and 1994 data, we preliminarily have identified several companies to undergo further study in the next phase of this project to identify the assumption and calculations methods used by reporting companies to enable us to put together a comprehensive guidebook for completing Form R to ensure consistent reporting in the future. The study will be undertaken in combination with NASSCO.

The following companies exhibited common and unique reporting anomalies and inconsistencies and will undergo further review in the next phase of this project: Newport News; Platzer; Newpark; and U.S. Navy. Additionally, several companies will be surveyed informally, over the telephone, where an isolated reporting issue requires follow-up.

[The following preliminary questions would be addressed to the reporting companies identified for further study]

FACILITY:

PRELIMINARY SURVEY WESTIONS

- 1. What are the methods of on-site recycling of metals?
- 2. What are the methods of off-site recycling of metals?
- 3. How are companies performing threshold calculations for welding emissions?
- 4. What are the methods of on-site recycling of solvents?
- 5. What are the methods of off-site recycling of solvents?
- 6. Where the amount transferred off-site is less than the amount identified as treated, recycled or recovered off-site, what is the source of the additional amount of chemicals identified as treated, recycled or recovered?
- 7. Are there intra-company transfers of materials that are not reported on the Form R?
- 8. How are threshold determinations being made for the following chemicals: ethoxyethanol; barim, barium compounds; benzene; carbon tetrachloride; chlorine; cumene; dichlorotetrafluroethane; glycol ethers; methyl tert-butyl ether; methylenebis; molybdenum trioxide; trichloroethylene; vinyl acetate; acrylonitrile; ammonia; hydrochloric acid; naphthalene?
- 9. Are reporting companies including off-site transfers in total quantity released?
- 10. Are companies including discharges to POTWs as discharges to bodies of water?

- 11. What are the various interpretations of the terms treatment, recycling and recovery?
- 12. What emission factors are being used to calculate releases?
- 13. Did any company experience a spill or release of any Form R chemicals?
- 14. How do companies report for the chemicals as opposed to the wastestream containing the chemicals?

SECTION A

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)	1993	Off-Site	1993	1993	1993	1993	1993
te.	Quantity	Energy	On-Ste	Off-Site	On-Site	Olf-Site	Total
	Released	Recovery	Recycling	Recycling	Treatment	Treatment	Wastestream

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-				Bodies of Water	LandM	Discharges to POTW	Locations	Released			Recycling	Treatment	Treatment	1993 Total Wastestream
-	scrifty	Toxic Chemical	(ibs/year)	(ibe/yeer)	(Ibs/yeer)	(ibe/year)	(ibs/yes/)	(Ibe/year)		(10479941)			(ibs/year)	
	ENERAL DYNAMICS CORP + GROTON, CT IGALLS SHIPBUILDING INC + PASCAGOULA, MS	1,1,1-TRICHLOROETHANE 1,1,1-TRICHLOROETHANE	1,512 28,000				8,678 1,440				8,678		1,200	10,190 29,200
	EWPORT NEWS SHIPBUILDING - NEWPORT NEWS, VA		46,000			11-499							23	
	EWPARK SHIPBUILDING & REPAIR - HOUSTON, TX	1,2-DICHLOROETHANE	255				_	125		139,568		7,202		146,895
	VONDALE IND INC MAIN YARD - AVONDALE, LA ATH IRON WORKS CORP - BATH, ME	1,2,4-TRIMETHYLBENZENE 1,2,4-TRIMETHYLBENZENE	17,640 17,890				5, 196			508				17,640 23,598
	ATH IRON WORKS CORP. PORT - RTE 1, BRUNSWICK,		22,200				1,250							23,450
P	DRTSMOUTH NAVAL SHIPYARD - KITTERY, ME	2-ETHOXYETHANOL	29,190				0.054	29,190						29,190
	RINITY IND INC - BEAUMONT, TX DMIRAL MARINE WORKS INC - PORT TOWNSEND, WA	2-ETHOXYETHANOL	11,276 11,000				3,951 880			13,700			880	29,276 25,580
	ANDALE IND GRP DIV - GULFPORT, MS	ACETONE	61,400				14,550							139,950
A 1	KONDALE IND INC MAIN YARD - AVONDALE, LA	ACETONE	17,860				7,970				00.400			25,830
	(TERMARINE USA - SAVANNAH, GA AKO MARINE INC - MIAMI, FL	ACETONE	91,407 170,000				134,988 34,800				66,492		8,600	230,322 204,800
	THERMOTT SHIPYARD AMELIA - AMELIA, LA	ACETONE	15,000				5,900	15,000	5,900				•	20,900
	PORT NEWS SHIPBUILDING - NEWPORT NEWS, VA		12,250			11-499					11,000		20	
	AKTSMOUTH NAVAL SHIPYARD - KITTERY, ME RINITY IND - GULFPORT, MS	ACETONE	8,476 9,059				811 10,134							10, 100 29, 327
	EWPARK SHIPBUILDING & REPAIR - HOUSTON, TX	ACRYLONITRILE	255				10,101	40	•	44,614		2,231		46,885
	EWPORT NEWS SHIPBUILDING - NEWPORT NEWS, VA		12,000				760	12,000					500	12,000 4,051
	/ONDALE IND INC MAIN YARD - AVONDALE, LA EWPORT NEWS SHIPBUILDING - NEWPORT NEWS, VA	BARIUM COMPOUNDS BARIUM COMPOUNDS	4,440 25,000				750 20, 450		21,000				500	46,000
	ATZER SHIPYARD INC - HOUSTON, TX	BENZENE	67,551				2-,	67,551				215		67,766
	GALLS SHIPBUILDING INC - PASCAGOULA, MS	CHLORINE	250			530		890			76 760	•	530	1,420 77,900
	ATH IRON WORKS CORP BATH, ME ATH IRON WORKS CORP BRUNSWICK, ME	CHROMIUM	5	-		1-10	72,820			4,790	75,750 15,450			20.640
	TH IRON WORKS CORP PORT - RTE 1, BRUNSWICK,	CHROMIUM	5				255	400			42,127	'		42,527
	KONDALE IND. INC. MAIN YARD - AVONDALE, LA	CHROMIUM COMPOUNDS	30			1-10					204,600			204,670 213
	ENERAL DYNAMICS CORP GROTON, CT GALLS SHIPBUILDING INC PASCAGOULS, MS	CHROMIUM COMPOUNDS CHROMIUM COMPOUNDS	161 250		5	1-10	3.520	206			7 10	500	3,000	5,030
	TERMARINE USA - SAVANNAH, GA	CHROMIUM COMPOUNDS	1,100		-	11-499		1,100			37,607			38,707
	DRSHIPCO CORP - NORFOLK, VA	CHROMIUM COMPOUNDS	500			1-10					245,800		5	1,105
	ITH IRON WORKS CORP BATH, ME ITH IRON WORKS CORP BRUNSWICK, ME	COPPER	5	250		1-10	246,048 84,430			27,780				246,200 112,360
	TH IRON WORKS CORP PORT - 20 COMMERCIAL ST .		5				3,690	400			3,440			3,840
	TH IRON WORKS CORP PORT - RTE 1, BRUNSWICK,		5	5		1-10					7.47		7 47	400
	N FRANCISCO DRY DOCK - SAN FRANCISCO, CA LANTIC DRY DOCK CORP - JACKSONVILLE, FL	COPPER COPPER COMPOUNDS	0 8,000				3,747 250				747		747 330	1, 494 38,500
	THLEHEM STEEL CORP PORT ARTHUR, TX	COPPER COMPOUNDS	/ 8,300				500						490	8,790
B	THLEHEM STEEL CORP BETH - SPARROWS POINT, M		11,202	250		1-10							14,682	25,884
	CADE GENERAL INC - PORTLAND, OR ERAL DYNAMICS CORP GROTON, CT	COPPER COMPOUNDS COPPER COMPOUNDS	17,514 952	7,006 684	14,011	1-10	11,207	49.039 1,642	11,206					60,245 1,642
GI	NERAL DYNAMICS CORP - NORTH KINGSTOWN, RI	COPPER COMPOUNDS	360		•	1-10		390						390
	GALLS SHIPBUILDING INC - PASCAGOULA, MS	COPPER COMPOUNDS	2,800		250		7,570		7,300			500		11,600
	ETRO MACHINE CORP NORFOLK, VA ITIONAL STEEL & SHIPBUILD - SAN DIEGO, CA	COPPER COMPOUNDS COPPER COMPOUNDS	6,351 200	6		121	5,580 4,400		4,400	,	2,385	18	3,316 1	12,070 4,601
	WPORT NEWS SHIPBUILDING - NEWPORT NEWS, VA		2,900	250	5	•	24,030					130	3,700	27,730
• •	RSHIPCO CORP - NORFOLK, VA	COPPER COMPOUNDS	250			500-999	20,000				20,000		1,000	22,500
	RTSMOUTH NAVAL SHIPYARD • KITTERY, ME DD PACIFIC SHIPYARDS • SEATTLE, WA	COPPER COMPOUNDS COPPER COMPOUNDS	4,490			1-10	1,500	4,490 24				1	1,615	4,490 1,640
	GALLS SHIPBUILDING INC - PASCAGOULA, MS	DICHLOROMETHANE	19.000			1-10	1,300		1,300			•	1,010	20,300
NE	WPORT NEWS SHIPBUILDING - NEWPORT NEWS, VA	DICHLOROMETHANE	15,000				4,500	15,000	4,500					19,500
	RTSMOUTH NAVAL SHIPYARD - KITTERY, ME	DICHLOROMETHANE	14,634				740	17,000	13 000		45 000			17,000 39,000
	WPORT NEWS SHIPBUILDING - NEWPORT NEWS, VA TH IRON WORKS CORP BATH. ME	ETHYLBENZENE ETHYLENE GLYCOL	11,300			11-499	27,422 20,200	11,000 0	13,000		15,000		20,200	20,200
NE	WPORT NEWS SHIPBUILDING - NEWPORT NEWS, VA	ETHYLENE GLYCOL	250			500-999	-	11				25,000	2,000	27,011
	RTSMOUTH NAVAL SHIPYARD - KITTERY, ME	ETHYLENE GLYCOL FREON 113	665				2,529	7,910		1,310	17 +67			9,220 33,810
	NERAL DYNAMICS CORP GROTON, CT SALLS SHIPBUILDING INC PASCAGOULA, MS	FREON 113	11,348 6,900				22,482 9,640	11,348 7,100	2,500		22,462		6,900	16,500
NE	WPORT NEWS SHIPBUILDING - NEWPORT NEWS, VA	FREON 113	-				100,300	-			100,700		•	100,700
	ONDALE IND INC MAIN YARD - AVONDALE, LA WPORT NEWS SHIPBUILDING - NEWPORT NEWS, VA	GLYCOL ETHERS	16,580 250				2,690	15,580 41	2,690			10,000		18,270 10,041
	LTER MARINE INC + LOCKPORT, LA	ISOPROPYL ALCOHOL (MANUFA					13,235	14,559	13,235			10,000		27,794
	INITY IND INC - BEAUMONT, TX	ISOPROPYL ALCOHOL (MANUFA					9,000	20,395	9,000					29,395

- 36

	Shipbuilding/Ship repair 1993 Form R 313 Deta												
		Fugitive	Discharges to	Releases		Transfers to	8 1 1993	1993 Off-Site	1993	1993	1993	1993	1993
		Or Non-Point Air Emission	Streams or Bodies of Water		Discharges to POTW	Other Off-Site Locations	Quantity Released		Recycling	Recycling	Treatment	Treatment	Total Wastestream
Facility	Toxic Chemical	(Ibe/yeer)	(be/year)	(ibe/year)	(ibs/year)	(ibs/yes/)	(ibs/yes/)	(ibs/year)	(ibe/yest)	(lbs/ysar)	(ibe/yeer)	(ibe/yeer)	(ibe/year)
TRINITY MARINE GROUP - MADISONVILLE, LA GENERAL DYNAMICS CORP - GROTON, CT	ISOPROPYL ALCOHOL (MANUF/ LEAD COMPOUNDS	12,145 250			1-10	3,354 2,178				1,640		538	18,853 2,734
INGALLS SHIPBUILDING INC - PASCAGOULA, MS	LEAD COMPOUNDS	250		5		335	1,000	40		20	500	30	1,590
NEWPORT NEWS SHIPBUILDING - NEWPORT NEWS, VA AVONDALE IND INC. MAIN YARD - AVONDALE, LA	LEAD COMPOUNDS MANGANESE	250 1,140		250	1-10	1,005 319,010	90 1,140			319,010	130	30	750 320,150
BROWN & ROOT INC MARINE - HOUSTON, TX	MANGANESE	900		72		38,500	10,400)		29,100			39,500
JEFFBOAT - JEFFERSONMILLE, IN	MANGANESE	1,902					1,902 640						1,902 640
GENERAL DYNAMICS CORP GROTON, CT GENERAL DYNAMICS CORP NORTH KINGSTOWN, RI	MANGANESE COMPOUNDS MANGANESE COMPOUNDS	640 220					220						220
INGALLS SHIPBUILDING INC - PASCAGOULA, MS	MANGANESE COMPOUNDS	250					500						500 300
NEWPORT NEWS SHIPBUILDING - NEWPORT NEWS, VA PLATZER SHIPYARD INC HOUSTON, TX	MANGANESE COMPOUNDS METHANOL	250 27,506					300 27,506				244		27, 75 0
QASCADE GENERAL INC - PORTLAND, OR	METHYL ETHYL KETONE	21,738				1,657	22,882	1,657					24,539
HDC BARGE INC - BROWNSVILLE, PA "BOAT - JEFFERSONVILLE, IN	METHYL ETHYL KETONE METHYL ETHYL KETONE	5,707 52,354				10,957 34,168							27,621 86,542
S POINT MARINE INC ESCATAWPA, MS	METHYL ETHYL KETONE	14,413				4,082	18,495	4,082			4,082		26,659
TRINITY MARINE GROUP - MADISONVILLE, LA COLONNAS SHIPYARD INC NORFOLK, VA	METHYL ETHYL KETONE METHYL ISOBUTYL KETONE	8,150 9,000				2,036	10,186 6,000						12,222 8,000
GENERAL DYNAMICS CORP GROTON, CT	METHYL ISOBUTYL KETONE	1,272				9,213	1,272	9,213					10,485
NORSHIPCO CORP NORFOLK, VA PLATZER SHIPYARD INC HOUSTON, TX	METHYL ISOBUTYL KETONE METHYL TERT-BUTYL ETHER	32,000 111,771				3,900	32,000 111,771		700		196		36,600 111,967
MAKO MARINE INC - MIAMI, FL	METHYLENEBIS(PHENYLISOCY)												0
NEWPORT NEWS SHIPBUILDING - NEWPORT NEWS, VA						2,411	20	1				2,411	20 2,411
SOUTHWEST MARINE SAN PEDRO - TERMINAL ISLAND, ALABAMA SHIPYARD INC MOBILE, AL	NAPHTHALENE N-BUTYL ALCOHOL	21,696 27,755		564		750		564				2,711	28,289
ATLANTIC MARINE INC JACKSONVILLE, FL	N-BUTYL ALCOHOL	43,000				2,050							46,050
BATH IRON WORKS CORP BATH, ME BATH IRON WORKS CORP. PORT - 20 COMMERCIAL ST ,	N-BUTYL ALCOHOL N-BUTYL ALCOHOL	47,918 9,130				15,377 2,140	47,918 9,130						63,298 11,270
BETHLEHEM STEEL CORP PORT ARTHUR, TX	N-BUTYL ALCOHOL	10,000				500	10,000	180				40	10,320
BETHLEHEM STEEL CORP. BETH - SPARROWS POINT, M CASCADE GENERAL INC PORTLAND, OR	N-BUTYL ALCOHOL N-BUTYL ALCOHOL	11,077 15,777	750			2,897 4,004	11,077 16,397					2,897	13,974 20,401
COLONNAS SHIPYARD INC NORFOLK, VA	N-BUTYL ALCOHOL	13,000					13,000						13,000
GENERAL DYNAMICS CORP GROTON, CT GRETNA MACHINE & IRON WORK - HARVEY, LA	N-BUTYL ALCOHOL N-BUTYL ALCOHOL	6,543 14,474				14,398 4,333	6,543 18,807						20,941 23,140
HBC BARGE INC BROWNSVILLE, PA	N-BUTYL ALCOHOL	4,801				1,730	6,531	1,730					5,261
INGALLS SHIPBUILDING INC - PASCAGOULA, MS	N-BUTYL ALCOHOL	420,000				110,000		110,000					530,000 26,121
JEFFBOAT - JEFFERSONVILLE, IN METRO MACHINE CORP NORFOLK, VA	N-BUTYL ALCOHOL N-BUTYL ALCOHOL	26,121 27,903				6,720	26,121 27,903					6,720	34.623
MID ATLANTIC FAC - NORFOLK, VA	N-BUTYL ALCOHOL	9,331				3,915	9,331					3,915	13,248
MOSS POINT MARINE INC ESCATAWPA, MS ONAL STEEL & SHIPBUILD - SAN DIEGO, CA	N-BUTYL ALCOHOL N-BUTYL ALCOHOL	27,552 63,000				7,776	35,328 63,000			7,776			50,880 74,000
		83,000			11-499	80,850				17,000		42	164,042
NORSHIPCO CORP NORFOLK, VA	N-BUTYL ALCOHOL	34,000 19,000				3,900	34,000 19,000		700				38,000 19,000
NORSHIPCO & DRYDOCK CORP NORFOLK, VA PLATZER SHIPYARD INC HOUSTON, TX	N-BUTYL ALCOHOL N-BUTYL ALCOHOL	15,740					15,740				40		15,780
PORTSMOUTH NAVAL SHIPYARD - KITTERY, ME	N-BUTYL ALCOHOL	68,265				6,161	69,624	4,803				440	79,400
SOUTHWEST MARINE INC - SAN DIEGO, CA TODD PACIFIC SHIPYARDS - SEATTLE, WA	N-BUTYL ALCOHOL N-BUTYL ALCOHOL	500 17,865				110 424	17,865	110 424	110 108			110	330 18,397
TRINITY MARINE GROUP - MADISONVILLE, LA	N-BUTYL ALCOHOL	6,890				1,722	8,612	1,722					10,334
WEST STATE INC - PORTLAND, OR BATH IRON WORKS CORP BATH, ME	N-BUTYL ALCOHOL NICKEL	63,513 5	ז' 5		1-10	12,881 82 1,976	63,513 2,200	12,881		85,050			76,394 87,250
BATH IRON WORKS CORP BRUNSWICK, ME	NICKEL	5	J		1-10	22,320	400		7,500	22,070			29,970
	NICKEL	5			1-10	255	400			24,388			24,788
INGALLS SHIPBUILDING INC PASCAGOULA, MS GENERAL DYNAMICS CORP GROTON, CT	NICKEL NICKEL COMPOUNDS	250 470			1-10		500 470					8	500 478
	NICKEL COMPOUNDS	260					260	4					260
NEWPORT NEWS SHIPBUILDING - NEWPORT NEWS, VA ACADIAN SHIPYARD INC BOURG, LA	NICKEL COMPOUNDS PROPYLENE	1,100 95	250	250	11-499	8,150	1,100 95	4,300			150	3,700	9,250 95
BATH IRON WORKS CORP BATH, ME	PROPYLENE	250					59						59
BATH IRON WORKS CORP. PORT - RTE 1, BRUNSWICK, BETHLEHEM STEEL CORP - PORT ARTHUR, TX	PROPYLENE	5 250					3 30						3 30
BETHLEHEM STEEL CORP. BETH - SPARROWS POINT, M	PROPYLENE	1,975					1,975						1,975
	P-XYLENE STYRENE	2,406 28,700				19,600	2,406 28,700	19,800			95		2,501 48,500
ANNUALE IND ONF DIA - OULFFORI, MO		20,700				19,000	20,700	19,000					-0,000

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Facility	Тохос Сћетисај	Fugitive Or Non-Poin Air Emission (Ibs/year)	Discharges to Streems or Bodies of Water (Ibs/year)		POTW	Transfers to Other Off-Site Locations (Ibs/year)	8 1 1993 Quantity Released (Ibs/year)	Energy Recovery	1993 On-Site Recycling (Ibs/year)	Recycling	Treatment	Treatment	1993 Total Wastestream (ibs/yeer)
GENERAL DYNAMICS CORP + NORTH KINGSTOWN, RI	STYRENE	595				854	595					854	
INTERMARINE USA - SAVANNAH, GA	STYRENE	25,685 78,000				60,057 2,500	60,370 78,000						85,942 80,500
MAKO MARINE INC MIAMI, FL. NEW ORLEANS SHIPYARD - WAGGAMAN, LA	STYRENE STYRENE	78,000				2,000	10,000						0
PLATZER SHIPYARD INC - HOUSTON, TX	STYRENE	5,595				26 600	5,595				289 26 000		5,884 64, 68 0
INGALLS SHIPBUILDING INC PASCAGOULA, MS NEWPORT NEWS SHIPBUILDING - NEWPORT NEWS, VA	SULFURIC ACID SULFURIC ACID	2,100 1,000				36,680 250				420	330,000		331,390
ALABAMA SHIPYARD INC MOBILE, AL	TOLUENE	13,113		2,920		2,920	13,113	2,920			•		16,033
GRETNA MACHINE & IRON WORK - HARVEY, LA	TOLUENE	948				4,333 13,235	5,281 15,622						9,614 28,657
HALTER MARINE INC - LOCKPORT, LA HALTER MARINE INC - MOSS POINT, MS	TOLUENE	15,622 13,658				10,333	24,191						34,524
HBC BARGE INC BROWNSVILLE, PA	TOLUENE	25,733				10,958	36,689	10,956					47,645
INGALLS SHIPBUILDING INC - PASCAGOULA, MS	TOLUENE	45,000				4,910	45,000			1,600		210	49,910 10,892
JEFFBOAT - JEFFERSONVILLE, IN DERMOTT SHIPYARD AMELIA - AMELIA, LA	TOLUENE	10,892 27,000				11,000	27,000						38,000
ITY IND - GULFPORT, MS	TOLUENE	9,059				10,134	19,193	10,134					29,327
ININITY MARINE GROUP - MADISONVILLE, LA	TOLUENE	5,564			11-49	3,355 9 3,300	6,919 11,000					11	12,274 14,311
NEWPORT NEWS SHIPBUILDING - NEWPORT NEWS, VA ALABAMA SHIPYARD INC MOBILE, AL	XYLENE (MIXED ISOMERS)	11,000 21,952		750		750	21,952					••	22,721
ATLANTIC DRY DOCK CORP JACKSONVILLE, FL	XYLENE (MIXED ISOMERS)	38,170				250	38,000						40,930
ATLANTIC MARINE INC MOBILE, AL	XYLENE (MIXED ISOMERS)	49,778		43,159		43,1 59 49,400	49,778 25,200						92,937 74,000
AVONDALE IND. INC. MAIN YARD - AVONDALE, LA BATH IRON WORKS CORP BATH, ME	XYLENE (MIXED ISOMERS) XYLENE (MIXED ISOMERS)	25,200 37,650				11,675	37,650						49,725
BATH IRON WORKS CORP PORT - 20 COMMERCIAL ST ,		11,500				2,700	11,500						14,200
BAY SHIPBUILDING CO STURGEON BAY, WI	XYLENE (MIXED ISOMERS)	10,806				492 1.000	10,806 28,000					110	11,235 29,350
BETHLEHEM STEEL CORP PORT ARTHUR, TX BETHLEHEM STEEL CORP. BETH - SPARROWS POINT, M	XYLENE (MIXED ISOMERS) XYLENE (MIXED ISOMERS)	28,000 28,903				7,576	28,903		000			7,576	
CASCADE GENERAL INC PORTLAND, OR	XYLENE (MIXED ISOMERS)	76,999				4,734	83,728						88,212
COLONNAS SHIPYARD INC NORFOLK, VA	XYLENE (MIXED ISOMERS)	22,000 3,119				16,788	22,000 3,119						22,000 19,907
GENERAL DYNAMICS CORP GROTON, CT GRETNA MACHINE & IRON WORK - HARVEY, LA	XYLENE (MIXED ISOMERS) XYLENE (MIXED ISOMERS)	14,811				4,333	19,144						23,477
HALTER MARINE INC LOCKPORT, LA	XYLENE (MIXED ISOMERS)	27,250				13,235	27,520						40,755
HALTER MARINE INC MOSS POINT, MS	XYLENE (MIXED ISOMERS)	12,090 7,819				10,333 10,957	22,423 18,776						32,756 29,733
HBC BARGE INC - BROWNSVILLE, PA INGALLS SHIPBUILDING INC PASCAGOULA, MS	XYLENE (MIXED ISOMERS) XYLENE (MIXED ISOMERS)	149,000				28,820	149,000			3,700		120	
JEFFBOAT - JEFFERSONMILLE, IN	XYLENE (MIXED ISOMERS)	48,068					48,068						48,068
MOSS POINT MARINE INC - ESCATAWPA, MS	XYLENE (MIXED ISOMERS)	30,789				2,532 1,265	33,321 12,755	2,532 1,288		2,532			38,385 14,043
NASHVILLE BRIDGE CO NASHVILLE, TN NATIONAL STEEL & SHIPBUILD - SAN DIEGO, CA	XYLENE (MIXED ISOMERS) XYLENE (MIXED ISOMERS)	12,755				42,700	40,000		12,000				94,700
NEWPORT NEWS SHIPBUILDING - NEWPORT NEWS, VA		142,000			11-496	9 241,850	142,000	213,000		27,000		180	382,180
SHIPCO CORP NORFOLK, VA	XYLENE (MIXED ISOMERS)	183,000				7,800	163,000		3,300				174,100
SHIPCO & DRYDOCK CORP NORFOLK, VA PETERSON BUILDERS INC STURGEON BAY, WI	XYLENE (MIXED ISOMERS) XYLENE (MIXED ISOMERS)	21,000 9,127			11-496	3,456	21,000 9,127			2,946			21,000 12,073
PLATZER SHIPYARD INC HOUSTON, TX	XYLENE (MIXED ISOMERS)	29,550				, iee	29,550		12,160		312		42,022
PORTSMOUTH NAVAL SHIPYARD - KITTERY, ME	XYLENE (MIXED ISOMERS)	47,235				11,204	48,303		7,460				65,900 81,682
TODD PACIFIC SHIPYARDS - SEATTLE, WA	XYLENE (MIXED ISOMERS) XYLENE (MIXED ISOMERS)	71,286 13,168				2,127 10,134	71,286 23,302		8,169				33,436
TRINITY IND - GULFPORT, MS TRINITY IND INC - BEAUMONT, TX	XYLENE (MIXED ISOMERS)	17,680				14,250	31,930						46,180
TRINITY MARINE GROUP - MADISONVILLE, LA	XYLENE (MIXED ISOMERS)	40,000				5,030	45,030						50,060
WEST STATE INC - PORTLAND, OR	XYLENE (MIXED ISOMERS) ZINC COMPOUNDS	102,068	1°	750		25,660 750	102,088 575						127,748 575
ALABAMA SHIPYARD INC - MOBILE, AL ATLANTIC MARINE INC JACKSONVILLE, FL	ZINC COMPOUNDS	5,800		750		250	5,800					462	6,262
ATLANTIC MARINE INC MOBILE, AL	ZINC COMPOUNDS	11,030	250			250	11,499						11,499
AVONDALE IND INC MAIN YARD - AVONDALE, LA	ZINC COMPOUNDS	10	1,948		11-490		2,200			5,075		12,737	7,275 24,004
BETHLEHEM STEEL, CORP. BETH - SPARROWS POINT, M INGALLS SHIPBUILDING INC PASCAGOULA. MS	ZINC COMPOUNDS	9,717 13,100	1,550 250	250	1-10	135,550	11,267 14,900	5,000		130,000	500	14,101	150,400
METRO MACHINE CORP NORFOLK, VA	ZINC COMPOUNDS	2,120			252	1,205	2,120	-		118	21	1,339	3,598
NEWPORT NEWS SHIPBUILDING - NEWPORT NEWS, VA	ZINC COMPOUNDS ZINC COMPOUNDS	21,000	250	5	11-499 500-999		21,300 500	21,300			160	11,200	53,960 1,500
NORSHIPCO CORP NORFOLK, VA TODD PACIFIC SHIPYARDS - SEATTLE, WA	ZINC COMPOUNDS	250 10	500		1-10		32				2	680	714
WEST STATE INC - PORTLAND, OR	ZINC COMPOUNDS					0							0
HALTER MARINE INC LOCKPORT, LA HALTER MARINE INC MOSS POINT, MS	ZINC (FUME OR DUST) ZINC (FUME OR DUST)	2,686 2,352				13,235 10,333	15,921 12,685	13,235 10,333					29,156 23,018
JEFFBOAT - JEFFERSONVILLE, IN	ZINC (FUME OR DUST)	۵,۵٫۷				219,050	219,050						219,050
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Shipbuilding/Ship repair

Facility	Shipbuilding/Ship repair 1993 Form R 313 Deta Toxoc Chemical	Fugitive Or Non-Poin Air Emission (Ibs/year)	Discharges to t Streems or Bodies of Water (bs/year)		Discharges (POTW (Ibs/year)	Transfer o Other Of Location (Ibs/yeer	f-Site 6	Quantity Released		1993 Olf-Site) Recycling (Ibe/yeer)	Treatment		
MOSS POINT MARINE INC - ESCATAWPA, MS NATIONAL STEEL & SHIPBUILD - SAN DIEGO, CA TRINITY MARINE GROUP - MADISONVILLE, LA WEST STATE INC - PORTLAND, OR	ZINC (FUME OR DUST) ZINC (FUME OR DUST) ZINC (FUME OR DUST) ZINC (FUME OR DUST)	40,505 1,000 10	58)		62	1,664 1,200 8,000 0	52,169 1,000 10 22,005	11, 6 64 2,200	11,664 16,400 64,600		6	75,497 19,606 84,610 22,005

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1993 Form R 313 Deta

Facility

BROWN & ROOT INC. MARINE - HOUSTON, TX

CASCADE GENERAL INC. - PORTLAND, OR

COLONNAS SHIPYARD INC - NORFOLK, VA

COLONNAS SHIPYARD INC. - NORFOLK, VA

COLONNAS SHIPYARD INC. - NORFOLK, VA

GENERAL DYNAMICS CORP. - GROTON. CT

GENERAL DYNAMICS CORP. - GROTON, CT

GENERAL DYNAMICS CORP - GROTON, CT

GENERAL DYNAMICS CORP. - GROTON, CT

GENERAL DYNAMICS CORP - GROTON, CT

1993 81 1993 1993 Transfers to 1993 Off-Site 1993 1993 1993 Fugitive Discharges to Releases On-Site Off-Site On-Site Off-Site Total Energy Or Non-Point Streems of To On-Site Discharges to Other Off-Site Quantity Recovery Recycling Recycling Treatment Treatment Wastestream Air Emission Bodies of Water LandNI POTW Locations Released (Ibs/year) (ibs/year) (ibs/year) (ibs/year) (ibs/year) (ibs/year) (ibs/year) **Toxic Chemical** (Ibe/yeer) (Ibe/yeer) (Ibe/yeer) (Ibs/year) (lbs/year) 95 95 ACADIAN SHIPYARD INC. - BOURG, LA PROPYLENE 95 880 25,580 11,000 13,700 ADMIRAL MARINE WORKS INC. - PORT TOWNSEND, WA ACETONE 11,000 860 28,289 N-BUTYL ALCOHOL 27,755 564 750 27,725 564 ALABAMA SHIPYARD INC. - MOBILE, AL 2,920 2,920 13,113 16,033 ALABAMA SHIPYARD INC. - MOBILE, AL 13,113 2,920 TOLUENE 22,721 21,952 XYLENE (MIXED ISOMERS) 750 750 769 ALABAMA SHIPYARD INC. - MOBILE, AL 21,952 750 575 ZINC COMPOUNDS 750 575 ALABAMA SHIPYARD INC. - MOBILE, AL 330 38,500 250 38,170 ATLANTIC DRY DOCK CORP. - JACKSONVILLE, FL. COPPER COMPOUNDS 8,000 40,930 250 38,000 330 2,600 **XYLENE (MIXED ISOMERS)** 38,170 ATLANTIC DRY DOCK CORP. - JACKSONVILLE, FL. 46.050 ATLANTIC MARINE INC. - JACKSONVILLE, FL 2,050 1,000 N-BUTYL ALCOHOL 43,000 2,050 43,000 250 5,800 462 6,262 ZINC COMPOUNDS ATLANTIC MARINE INC. - JACKSONVILLE, FL. 5,800 92,937 49,778 43,159 43,159 43.159 XYLENE (MIXED ISOMERS) 49,778 ATLANTIC MARINE INC. - MOBILE, AL 11,499 11,030 250 11,499 ZINC COMPOUNDS 250 ATLANTIC MARINE INC. - MOBILE, AL 14,550 64,000 139,950 61,400 14,550 AVONDALE IND. GRP DIV. - GULFPORT, MS ACETONE 61,400 48,500 19,800 28,700 19,800 AVONDALE IND. GRP DIV. - GULFPORT, MS STYRENE 28,700 17,640 17.640 1,2,4-TRIMETHYLBENZENE 17,640 *VONDALE IND INC. MAIN YARD - AVONDALE, LA -5 25,830 17,800 7,970 17,860 7,970 ONDALE IND. INC. MAIN YARD - AVONDALE, LA ACETONE 500 4,051 3,551 AVONDALE IND INC. MAIN YARD - AVONDALE, LA 750 BARIUM COMPOUNDS 4,440 204,670 304.230 204,600 37 1-10 70 AVONDALE IND INC. MAIN YARD - AVONDALE, LA CHROMIUM COMPOUNDS 30 18,270 15,580 2,690 AVONDALE IND INC. MAIN YARD - AVONDALE, LA **GLYCOL ETHERS** 16,580 2,690 319.010 320,150 319,010 1,140 AVONDALE IND. INC. MAIN YARD - AVONDALE, LA MANGANESE 1.140 74,600 49,400 XYLENE (MIXED ISOMERS) 49,400 25,200 AVONDALE IND. INC. MAIN YARD - AVONDALE, LA 25,200 7.275 5,075 AVONDALE IND. INC. MAIN YARD - AVONDALE. LA 1.948 11-499 5,060 2,200 ZINC COMPOUNDS 10 23,598 5,200 508 1.2.4-TRIMETHYLBENZENE 5,196 17,690 BATH IRON WORKS CORP. - BATH, ME 17.890 77,900 1-10 72.820 2,150 75,750 BATH IRON WORKS CORP. - BATH. ME CHROMIUM 5 5 246,200 1-10 246.048 400 245,800 5 250 BATH IRON WORKS CORP. - BATH, ME COPPER 20,200 20,200 20,200 ETHYLENE GLYCOL 11-499 a BATH IRON WORKS CORP. - BATH, ME 63,298 15.377 47.918 15,380 47,918 BATH IRON WORKS CORP. - BATH. ME N-BUTYL ALCOHOL 85,050 87,250 5 1-10 821,976 2,200 BATH IRON WORKS CORP. - BATH, ME NICKEL -5 59 BATH IRON WORKS CORP. - BATH, ME PROPYLENE 250 49.725 11.675 37.650 11.675 400 XYLENE (MIXED ISOMERS) 37,650 BATH IRON WORKS CORP. - BATH, ME 4,790 20,640 15,700 15,450 400 BATH IRON WORKS CORP. - BRUNSWICK, ME CHROMIUM 5 112,360 84,430 400 27,780 84,180 BATH IRON WORKS CORP. - BRUNSWICK, ME COPPER 5 29,970 22,320 400 7,500 22,070 BATH IRON WORKS CORP. - BRUNSWICK, ME NICKEL 5 400 3,440 3.840 3,690 BATH IRON WORKS CORP. PORT - 20 COMMERCIAL ST., COPPER 11,270 9,130 2.140 2.140 BATH IRON WORKS CORP. PORT - 20 COMMERCIAL ST., N-BUTYL ALCOHOL 9,130 2,700 14,200 BATH IRON WORKS CORP. PORT - 20 COMMERCIAL ST , XYLENE (MIXED ISOMERS) 2,700 11,500 11,500 1.250 23,450 22,200 22,200 1,250 BATH IRON WORKS CORP. PORT - RTE 1, BRUNSWICK, 2-ETHOXYETHANOL 42,527 255 400 42,127 BATH IRON WORKS CORP. PORT - RTE 1. BRUNSWICK. CHROMIUM 5 400 5 1-10 260 400 COPPER BATH IRON WORKS CORP. PORT - RTE 1, BRUNSWICK, 5 . 24,788 255 400 24,388 1-10 BATH IRON WORKS CORP. PORT - RTE 1, BRUNSWICK, NICKEL 5 3 **'TH IRON WORKS CORP. PORT - RTE 1, BRUNSWICK,** PROPYLENE 11.235 492 10,806 429 **XYLENE (MIXED ISOMERS)** 10,808 Y SHIPBUILDING CO. - STURGEON BAY, WI 490 8,790 500 COPPER COMPOUNDS 8,300 8,300 **BETHLEHEM STEEL CORP. - PORT ARTHUR, TX** 10,320 40 500 10,000 180 100 BETHLEHEM STEEL CORP. - PORT ARTHUR, TX N-BUTYL ALCOHOL 10,000 30 PROPYLENE 250 BETHLEHEM STEEL CORP. - PORT ARTHUR, TX 110 29,350 690 1,000 28,000 550 . BETHLEHEM STEEL CORP. - PORT ARTHUR, TX XYLENE (MIXED ISOMERS) 28.000 25,884 14.682 14,682 11,202 BETHLEHEM STEEL CORP. BETH - SPARROWS POINT, M COPPER COMPOUNDS 11,202 250 1-10 13,974 2,897 BETHLEHEM STEEL CORP. BETH - SPARROWS POINT, M N-BUTYL ALCOHOL 11,077 2,897 11.077 1.975 BETHLEHEM STEEL CORP. BETH - SPARROWS POINT, M PROPYLENE

1.975 1.975 7.576 BETHLEHEM STEEL CORP. BETH - SPARROWS POINT, M XYLENE (MIXED ISOMERS) 7.576 28,903 28,903 12,737 1,550 1-10 12.737 11,267 BETHLEHEM STEEL CORP. BETH - SPARROWS POINT, M ZINC COMPOUNDS 9,717 1 38,500 10,400 29,100 MANGANESE 72 900 -5 49,039 11,206 17.514 7,006 14,011 11,207 COPPER COMPOUNDS 1,657 22,882 1,657 1,144 21,738 METHYL ETHYL KETONE 4.004 16.397 4,004 N-BUTYL ALCOHOL 15,777 750 4,734 83,728 4,484 78,999 4.158 **XYLENE (MIXED ISOMERS)** 8,000 METHYL ISOBUTYL KETONE 9,000 N-BUTYL ALCOHOL 13,000 13,000 22,000 XYLENE (MIXED ISOMERS) 22,000 8,678 8.678 1.512 1.1.1-TRICHLOROETHANE 1.512 206 CHROMIUM COMPOUNDS 161 38 1-10 7 1,642 COPPER COMPOUNDS 952 684 1-10 22,462 22,462 11.348 FREON 113 11,348 538 1 640 LEAD COMPOUNDS 250 366 1-10 2,178 556

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36,479

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1993 Form R 313 Data

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	1993 Form R 313 Deta												
Facility .	Tado Chemical	Fugitive Or Non-Poin Air Emission (Ibs/year)	Discharges to Streams or Bodies of Water (Ibs/year)		Discharges to POTW (Ibs/year)	Transfers to Other Off-Site Locations (Ibs/year)	8 1 1993 Quantity Released (Ibs/year)			1993 Off-Site Recycling (Ibs/year)	Treatment	Treatment	1993 Total Wastestream (Ibs/year)
GENERAL DYNAMICS CORP GROTON, CT	MANGANESE COMPOUNDS	640					640)					640
GENERAL DYNAMICS CORP GROTON, CT	METHYL ISOBUTYL KETONE	1,272				9,213							10,485
GENERAL DYNAMICS CORP GROTON, CT GENERAL DYNAMICS CORP GROTON, CT	N-BUTYL ALCOHOL NICKEL COMPOUNDS	6,543 470			1-1	14,395 n	6,543 470					8	20,941 478
GENERAL DYNAMICS CORP GROTON, CT	XYLENE (MIXED ISOMERS)	3,119			1-1	16,788			l.			, u	19,907
GENERAL DYNAMICS CORP NORTH KINGSTOWN, RI	COPPER COMPOUNDS	380					390)					390
GENERAL DYNAMICS CORP NORTH KINGSTOWN, RI GENERAL DYNAMICS CORP NORTH KINGSTOWN, RI	MANGANESE COMPOUNDS NICKEL COMPOUNDS	220					220						220 260
GENERAL DYNAMICS CORP NORTH KINGSTOWN, RI	STYRENE	260 595				854	260					854	
GRETNA MACHINE & IRON WORK - HARVEY, LA	N-BUTYL ALCOHOL	14,474				4,333	18,807	4,333					23,140
GRETNA MACHINE & IRON WORK - HARVEY, LA	TOLUENE	945				4,333							9,614
GRETNA MACHINE & IRON WORK - HARVEY, LA HALTER MARINE INC LOCKPORT, LA	XYLENE (MIXED ISOMERS) ISOPROPYL ALCOHOL (MANUFA	14,811 14,599				4,333 13,235							23,477 27,794
HALTER MARINE INC LOCKPORT, LA	TOLUENE	15,622				13,235							28,857
'ALTER MARINE INC LOCKPORT, LA	XYLENE (MIXED ISOMERS)	27,250				13,235	27,520	13,235	i				40,755
ALTER MARINE INC LOCKPORT, LA ALTER MARINE INC MOSS POINT, MS	ZINC (FUME OR DUST) TOLUENE	2,686				13,235							29,156 34,524
HALTER MARINE INC MOSS POINT, MS	XYLENE (MIXED ISOMERS)	13,858 12,090	•			10,333 10,333							34,524 32,756
HALTER MARINE INC MOSS POINT, MS	ZINC (FUME OR DUST)	2,352				10,333							23,018
HBC BARGE INC BROWNSVILLE, PA	METHYL ETHYL KETONE	5,707				10,957							27,621
HBC BARGE INC, - BROWNSVILLE, PA HBC BARGE INC BROWNSVILLE, PA	N-BUTYL ALCOHOL TOLUENE	4,801 25,733				1,730 10,956							8,261 47,645
HBC BARGE INC, - BROWNSVILLE, PA	XYLENE (MIXED ISOMERS)	7,819				10,957							29,733
INGALLS SHIPBUILDING INC PASCAGOULA, MS	1,1,1-TRICHLOROETHANE	28,000				1,440	28,000)				1,200	29,200
INGALLS SHIPBUILDING INC PASCAGOULA, MS	CHLORINE	250			53		890					530	
INGALLS SHIPBUILDING INC PASCAGOULA, MS INGALLS SHIPBUILDING INC PASCAGOULA, MS	COPPER COMPOUNDS DICHLOROMETHANE	2,800 19,000		250	1	7,570 1,300					500		11,600 20,300
INGALLS SHIPBUILDING INC PASCAGOULA, MS	FREON 113	6,900				9,640						6,900	
INGALLS SHIPBUILDING INC PASCAGOULA, MS	LEAD COMPOUNDS	250		5		335	1,000	40		20	500		1,590
INGALLS SHIPBUILDING INC PASCAGOULA, MS	MANGANESE COMPOUNDS	250				**0.000	500						500 620 000
INGALLS SHIPBUILDING INC PASCAGOULA, MS INGALLS SHIPBUILDING INC PASCAGOULA, MS	N-BUTYL ALCOHOL NICKEL	420,000 250				110,000	420,000 500						530,000 500
INGALLS SHIPBUILDING INC PASCAGOULA, MS	SULFURIC ACID	2,100				36,680					26,000	680	
INGALLS SHIPBUILDING INC PASCAGOULA, MS	TOLUENE	45,000				4,910				1,600		210	
INGALLS SHIPBUILDING INC PASCAGOULA, MS INGALLS SHIPBUILDING INC PASCAGOULA, MS	XYLENE (MIXED ISOMERS)	149,000	260	250		28,820				3,700	500	120	177,820 150,400
INGALLS SHIPBUILDING INC PASCAGOULA, MS INGALLS SHIPBUILDING INC PASCAGOULS, MS	ZINC COMPOUNDS CHROMIUM COMPOUNDS	13,100 250	250 250			135,550 3,520				130,000	500		
INTERMARINE USA - SAVANNAH, GA	ACETONE	91,407	200			134,988						0,000	230,322
INTERMARINE USA - SAVANNAH, GA	CHROMIUM COMPOUNDS	1,100			11-49		1,100			37,607			38,707
INTERMARINE USA - SAVANNAH, GA "FFBOAT - JEFFERSONVILLE, IN	STYRENE MANGANESE	25,885				60,057	60,370 1,902						85,942 1,902
FFBOAT - JEFFERSONVILLE, IN	METHYL ETHYL KETONE	52,354				34,188							86,542
JEFFBOAT - JEFFERSONVILLE, IN	N-BUTYL ALCOHOL	26,121					26,121						26,121
JEFFBOAT - JEFFERSONVILLE, IN	TOLUENE	10,892					10,892						10,892
JEFFBOAT - JEFFERSONVILLE, IN JEFFBOAT - JEFFERSONVILLE, IN	XYLENE (MIXED ISOMERS) ZINC (FUME OR DUST)	48,068				219,050	48,068 219,050						48,068 219,050
MAKO MARINE INC MIAMI, FL	ACETONE	170,000				34,800			<i>,</i>			8,800	
MAKO MARINE INC MIAMI, FL	METHYLENEBIS(PHENYLISOCYA							•				•	0
MAKO MARINE INC MIAMI, FL	STYRENE	78,000				2,500							80,500
MCDERMOTT SHIPYARD AMELIA - AMELIA, LA MCDERMOTT SHIPYARD AMELIA - AMELIA, LA	ACETONE	15,000 27,000	i'			5,900 11,000							20,900 38,000
METRO MACHINE CORP NORFOLK, VA	COPPER COMPOUNDS	6,351	•		121		6,351			2,385	18	3,316	
METRO MACHINE CORP NORFOLK, VA	N-BUTYL ALCOHOL	27,903				6,720	27,903					6,720	34,623
METRO MACHINE CORP NORFOLK, VA	ZINC COMPOUNDS	2,120			252					118	21	1,339	3,598
MID ATLANTIC FAC NORFOLK, VA MOSS POINT MARINE INC ESCATAWPA, MS	N-BUTYL ALCOHOL METHYL ETHYL KETONE	9,331 14,413				3,915 4,082	9,331 18,495	4,082			4,082	3,915	13,246 26,659
MOSS POINT MARINE INC ESCATAWPA, MS	N-BUTYL ALCOHOL	27,552				7,776	35,328	7,776		7,776			50,880
MOSS POINT MARINE INC ESCATAWPA, MS	XYLENE (MIXED ISOMERS)	30,789				2,532	33,321	2,532		2,532			38,385
MOSS POINT MARINE INC ESCATAWPA, MS NASHVILLE BRIDGE CO NASHVILLE, TN	ZINC (FUME OR DUST) XYLENE (MIXED ISOMERS)	40,505 12,755				11,664 1,288	52,169 12,755	11,664 1,288		11,664			75,497 14,043
NATIONAL STEEL & SHIPBUILD - SAN DIEGO, CA	COPPER COMPOUNDS	200	6		1	4,400	200	4,400				1	4,601
NATIONAL STEEL & SHIPBUILD - SAN DIEGO, CA	N-BUTYL ALCOHOL	63,000	-			11,000	63,000	11,000					74,000
NATIONAL STEEL & SHIPBUILD - SAN DIEGO, CA NATIONAL STEEL & SHIPBUILD - SAN DIEGO, CA	XYLENE (MIXED ISOMERS) ZINC (FUME OR DUST)	40,000 1,000	K 0		6	42,700	40,000 1,000		12,000	16,400		6	94,700 19,606
WATCHAL STEEL & SHIPDUILD + SAN DIEGU, CA	LING (FOME ON DUST)	1,000	58		0	21,200	1,000	2,200		10,400		0	19,000

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Facility	Toxic Chemical	Fugitive Or Non-Poin Air Emission (Ibs/year)	Discharges to t Streams or Bodies of Water (bs/year)		Discharges to POTW (Ibs/year)	Transfers to Other Off-Site Locations (Ibs/year)	8 1 1993 Quantity Released (Ibs/yeer)			Recycling	Treatment	Off-Site Treatment	1993 Total Wastestream (Ibs/year)
NEW ORLEANS SHIPYARD - WAGGAMAN, LA	STYRENE		()			(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		()					0
NEWPARK SHIPBUILDING & REPAIR - HOUSTON, TX	1,2-DICHLOROETHANE	255					125		139,568		7,202		146,895
NEWPARK SHIPBUILDING & REPAIR - HOUSTON, TX NEWPORT NEWS SHIPBUILDING - NEWPORT NEWS, VA	ACRYLONITRILE	255 46,000)	11-49	9 16,000	40 46,000		44,614		2,231	23	46,885 62,023
NEWPORT NEWS SHIPBUILDING - NEWPORT NEWS, VA		12,250			11-490					11,000		20	
NEWPORT NEWS SHIPBUILDING - NEWPORT NEWS, VA		12,000				20.450	12,000						12,000
NEWPORT NEWS SHIPBUILDING - NEWPORT NEWS, VA NEWPORT NEWS SHIPBUILDING - NEWPORT NEWS, VA		25,000 2,900) :	5 11-499	20,450 9 24,030					130	3,700	46,000 27,730
NEWPORT NEWS SHIPBUILDING - NEWPORT NEWS, VA	DICHLOROMETHANE	15,000)			4,500	15,000	4,500	1			•	19,500
NEWPORT NEWS SHIPBUILDING - NEWPORT NEWS, VA NEWPORT NEWS SHIPBUILDING - NEWPORT NEWS, VA		11,300 250			500-999	27,422	11,000 11	-)	15,000	25,000	2,000	39,000 27,011
NEWPORT NEWS SHIPBUILDING - NEWPORT NEWS, VA		2.00			000-80	100,300				100,700		2,000	100,700
NEWPORT NEWS SHIPBUILDING - NEWPORT NEWS, VA		250					41				10,000		10,041
NEWPORT NEWS SHIPBUILDING - NEWPORT NEWS, VA "EWPORT NEWS SHIPBUILDING - NEWPORT NEWS, VA		250 250		250) 1-1(0 1,005	90 300				130	30	750 300
EWPORT NEWS SHIPBUILDING - NEWPORT NEWS, VA	METHYLENEBIS(PHENYLISOCY/	A 250)				20)					20
NEWPORT NEWS SHIPBUILDING - NEWPORT NEWS, VA		83,000		250	11-499) 11-499					17,000	150	42 3,700	
NEWPORT NEWS SHIPBUILDING - NEWPORT NEWS, VA NEWPORT NEWS SHIPBUILDING - NEWPORT NEWS, VA		1,100) 250	//	250				420			331,390
NEWPORT NEWS SHIPBUILDING - NEWPORT NEWS, VA		11,000			11-49							11	
NEWPORT NEWS SHIPBUILDING - NEWPORT NEWS, VA NEWPORT NEWS SHIPBUILDING - NEWPORT NEWS, VA		142,000 21,000			11-499 5 11-499					27,000	160	180 11,200	
NORSHIPCO CORP NORFOLK, VA	CHROMIUM COMPOUNDS	500	li in the second se	•	1-10	0 1,040	1,100)				5	1,105
NORSHIPCO CORP NORFOLK, VA	COPPER COMPOUNDS	250			500-999) 700	20,000	I	1,000	22,500 36,600
NORSHIPCO CORP NORFOLK, VA NORSHIPCO CORP NORFOLK, VA	METHYL ISOBUTYL KETONE N-BUTYL ALCOHOL	32,000 34,000				3,900 3,900							38,600
NORSHIPCO CORP NORFOLK, VA	XYLENE (MIXED ISOMERS)	163,000	1			7,800	163,000	7,800					174,100
NORSHIPCO CORP NORFOLK, VA NORSHIPCO & DRYDOCK CORP NORFOLK. VA	ZINC COMPOUNDS N-BUTYL ALCOHOL	250			500-999	9	500 19,000					1,000	1,500 19,000
NORSHIPCO & DRYDOCK CORP NORFOLK, VA	XYLENE (MIXED ISOMERS)	21,000					21,000						21,000
PETERSON BUILDERS INC STURGEON BAY, WI	XYLENE (MIXED ISOMERS)	9,127			11-499	9 3,456				2,946			12,073
PLATZER SHIPYARD INC HOUSTON, TX PLATZER SHIPYARD INC HOUSTON, TX	BENZENE METHANOL	67,551 27,508					67,551 27,506				215 244		67,766 27,750
PLATZER SHIPYARD INC HOUSTON, TX	METHYL TERT-BUTYL ETHER	111,771					111,771				196		111,967
PLATZER SHIPYARD INC HOUSTON, TX	N-BUTYL ALCOHOL P-XYLENE	15,740 2,408					15,740 2,406				40 95		15,780 2,501
PLATZER SHIPYARD INC HOUSTON, TX PLATZER SHIPYARD INC HOUSTON, TX	STYRENE	5,595					5,595				289		5,884
PLATZER SHIPYARD INC HOUSTON, TX	XYLENE (MIXED ISOMERS)	29,550					29,550	1	12,160		312		42,022
PORTSMOUTH NAVAL SHIPYARD - KITTERY, ME PORTSMOUTH NAVAL SHIPYARD - KITTERY, ME	2-ETHOXYETHANOL ACETONE	29,190				811	29,190 9,166		414				29,190 10,100
ORTSMOUTH NAVAL SHIPYARD - KITTERY, ME	COPPER COMPOUNDS	4,490				011	4,490						4,490
DRTSMOUTH NAVAL SHIPYARD - KITTERY, ME	DICHLOROMETHANE	14,634 685				740 2,529			1,310				9,220
PORTSMOUTH NAVAL SHIPYARD - KITTERY, ME PORTSMOUTH NAVAL SHIPYARD - KITTERY, ME	ETHYLENE GLYCOL N-BUTYL ALCOHOL	68,265				6,161	7,910 69,624						79,400
PORTSMOUTH NAVAL SHIPYARD - KITTERY, ME	XYLENE (MIXED ISOMERS)	47,235				11,204	48,303	10,137	7,460			3.47	65,900
SAN FRANCISCO DRY DOCK - SAN FRANCISCO, CA SOUTHWEST MARINE INC SAN DIEGO, CA	COPPER N-BUTYL ALCOHOL	0 500				3,747 110		110	110	747		747 110	1,494 330
SOUTHWEST MARINE SAN PEDRO - TERMINAL ISLAND,	NAPHTHALENE	21,596				2,411						2,411	2,411
TODD PACIFIC SHIPYARDS - SEATTLE, WA	COPPER COMPOUNDS	10			1-10) 1,500 424	24		108		1	1,615	1,640 18,397
TODD PACIFIC SHIPYARDS - SEATTLE, WA TODD PACIFIC SHIPYARDS - SEATTLE, WA	N-BUTYL ALCOHOL XYLENE (MIXED ISOMERS)	17,865 71,286				2,127	17,865 71,286						81,582
TODD PACIFIC SHIPYARDS - SEATTLE, WA	ZINC COMPOUNDS	10	500		1-10) 500	32	-	-		2	680	714
TRINITY IND GULFPORT, MS TRINITY IND GULFPORT, MS	ACETONE	9,059 9,059				10,134 10,134	19,193 19,193						29,327 29,327
TRINITY IND GULFPORT, MS	XYLENE (MIXED ISOMERS)	13,168				10,134	23,302						33,436
TRINITY IND. INC BEAUMONT, TX	2-ETHOXYETHANOL	11,276				3,951	20,276	9,000					29,276
TRINITY IND. INC BEAUMONT, TX TRINITY IND. INC BEAUMONT, TX	ISOPROPYL ALCOHOL (MANUFA XYLENE (MIXED ISOMERS)	11,395 17,680				9,000 14,250	20,395 31,930	9,000 14,250					29,395 46,180
TRINITY MARINE GROUP - MADISONVILLE, LA	ISOPROPYL ALCOHOL (MÁNUFA	12,145				3,354	15,499	3,354					18,853
	METHYL ETHYL KETONE N-BUTYL ALCOHOL	8,150 6,890				2,036 1,722	10,186 8,612	2,036 1,722					12,222 10,334
	TOLUENE	5,564				3,355	8,919	3,355					12,274
TRINITY MARINE GROUP - MADISONVILLE, LA	XYLENE (MIXED ISOMERS)	40,000				5,030	45,030	5,030		64 600			50,060 64,610
TRINITY MARINE GROUP - MADISONVILLE, LA	ZINC (FUME OR DUST)	10				48,000	10			64,600			04,010

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Facility	1993 Form R 313 Data Toxic Chemical	Fugitive Discharges to Or Non-Point Streams or Air Emission Bodies of Water (Ibs/year) (Ibs/year)	Releases To On-Site Discharges (r Landfill POTW (Ibs/year) (Ibs/year)	Transfers to o Other Off-Site Locations (Ibs/year)	Quantity Released	Recovery	1993 1993 On-Site Off-Site Recycling Recyclin (Ibs/year) (Ibs/year)	g Treatment Trea	Ste Total Itment Wastestream
WEST STATE INC PORTLAND, OR WEST STATE INC PORTLAND, OR WEST STATE INC PORTLAND, OR WEST STATE INC PORTLAND, OR	N-BUTYL ALCOHOL XYLENE (MIXED ISOMERS) ZINC COMPOUNDS ZINC (FUME OR DUST)	63,513 102,068		12,881 25,000 0 0		12,581 25,660			76,394 127,748 0 22,005

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SECTION B

Facilit, GUNDERSONING INGALLS SHIPBUILDING INC NEWPORT NEWS SHIPBUILDING U.S. NAVY NORFOLK NAVAL SHIP: KD PLATZER SHIPYARD INC NEWPARK SHIPBUILDING & REP AVONDALE IND INC MAIN YA BATH IRON WORKS CORP INGALLS SHIPBUILDING INC NATIONAL STEEL & SHIPBUILD BATH IRON WORKS CORP PORT BROWN & ROOT INC MARINE F NEWPORT NEWS SHIPBUILDING PLATZER SHIPYARD INC PLATZER SHIPYARD INC INGALLS SHIPBUILDING INC BATH IRON WORKS CORP BATH IRON WORKS CORP BATH IRON WORKS CORP PORT GUNDERSON INC AVONDALE IND INC MAIN YA GENERAL DYNAMICS CORP ELE INGALLS SHIPBUILDING INC J RAY MCDERMOTT INC SHIPYARD NEWPORT NEWS SHIPBUILDING NORSHIPCO CORP BATH IRON WORKS CORP BATH IRON WORKS CORP BATH IRON WORKS CORP PORT GUNDERSON INC ATLANTIC MARINE INC AVONDALE IND INC MAIN YA BETHLEHEM STEEL CORP BETH CASCADE GENERAL INC GENERAL DYNAMICS CORP ELE GENERAL DYNAMICS CORP ELE

INGALLS SHIPBUILDING INC	COPPER COMPOUNDS
J RAY MCDERMOTT INC SHIPYARD	COPPER COMPOUNDS
NEWPORT NEWS SHIPBUILDING	COPPER COMPOUNDS
NORSHIPCO CORP	COPPER COMPOUNDS
SAN FRANCISCO DRY DOCK SAN	COPPER COMPOUNDS
TODD PACIFIC SHIPYARDS	COPPER COMPOUNDS
U S NAVY NORFOLK NAVAL SHIPYARD	COPPER COMPOUNDS
PLATZER SHIPYARD INC	CUMENE
INGALLS SHIPBUILDING INC	DICHLOROMETHANE
NEWPORT NEWS SHIPBUILDING	DICHLOROMETHANE
U S NAVY NORFOLK NAVAL SHIPYARD	DICHLOROMETHANE
NEWPORT NEWS SHIPBUILDING	DICHLOROTETRAFLUOROETH
NEWPORT NEWS SHIPBUILDING	ETHYLBENZENE
PLATZER SHIPYARD INC	ETHYLBENZENE
NEWPORT NEWS SHIPBUILDING	ETHYLENE GLYCOL
U.S. NAVY NORFOLK NAVAL SHIPYARD	ETHYLENE GLYCOL
PLATZER SHIPYARD INC	ETHYLENE GYLCOL
GENERAL DYNAMICS CORP. ELE	FREON 113
NEWPORT NEWS SHIPBUILDING	FREON 113
U.S. NAVY NORFOLK NAVAL SHIPTARD	FREON 113
AVONDALE IND INC MAIN YA	GLYCOL ETHERS
ALABAMA SHIPYARD INC	ISOPROPYL ALCOHOL
HALTER MARINE INC LOCKPOR	ISOPROPYL ALCOHOL (MANU
GENERAL DYNAMICS CORP ELE	LEAD COMPOUNDS
INGALLS SHIPBUILDING INC	LEAD COMPOUNDS
NEWPORT NEWS SHIPBUILDING	LEAD COMPOUNDS
BROWN & ROOT INC MARINE F	MANGANESE
GRETNA MACHINE & IRON WORK	MANGANESE
GUNDERSON INC	MANGANESE
JEFFBOAT	MANGANESE
TRINITY MARINE GROUP MADIS	MANGANESE
INGALLS SHIPBUILDING INC J RAY MCDERMOTT INC SHIPYARD NEWPORT NEWS SHIPBUILDING NORSHIPCO CORP SAN FRANCISCO DRY DOCK SAN TODD PACIFIC SHIPYARDS U S NAVY NORFOLK NAVAL SHIPYARD PLATZER SHIPYARD INC INGALLS SHIPBUILDING INC NEWPORT NEWS SHIPBUILDING U S NAVY NORFOLK NAVAL SHIPYARD NEWPORT NEWS SHIPBUILDING PLATZER SHIPYARD INC NEWPORT NEWS SHIPBUILDING U S NAVY NORFOLK NAVAL SHIPYARD PLATZER SHIPYARD INC NEWPORT NEWS SHIPBUILDING U S NAVY NORFOLK NAVAL SHIPYARD PLATZER SHIPYARD INC SHIPBUILDING U S NAVY NORFOLK NAVAL SHIPYARD PLATZER SHIPYARD INC GENERAL DYNAMICS CORP ELE NEWPORT NEWS SHIPBUILDING U S NAVY NORFOLK NAVAL SHIPYARD PLATZER SHIPYARD INC ALBBAM SHIPYARD INC HALTER MARINE INC LOCKPOR GENERAL DYNAMICS CORP ELE INGALLS SHIPBUILDING INC NEWPORT NEWS SHIPBUILDING BROWN & ROOT INC MARINE F GRETTA MACHINE & IRON WORK GUNDERSON INC JEFFBOAT TRINITY MARINE GROUP MADIS GENERAL DYNAMICS CORP ELE FURPAL DYNAMICS CORP ELE FURPAL TO THE SHIPBUILDING BROWN & ROOT INC MARINE F GRETAL MACHINE & IRON WORK GUNDERSON INC JEFFBOAT	MANGANESE COMPOUNDS
INGAI LS SHIPBUILDING INC	MANGANESE COMPOUNDS

١Ň	IGAI	LS SHIPBUI	LDINGI	NC
J	RA۱	MCDERMC	DTT INC	SHIPYARD

La tana a	Fugilise Or Non-Point Air Emissions (Ibs/year)	Point Air Emissions	Discharge to Streams or Bodies of Water (Ibs/year)	Landfill		Transfers to Other Off-sit Locations (Ibs/year)	Quantily Released			1594 Off-sita Recycling (lbs/year)
I to remove	(IDSIYCAI)	(1023,000)	(102) 601)	(103)601	(103)801)	(103) (201)	(103/96/9	(1037)001)	(103/304/3	(123) Cull
1 1 1 TRICHLÓRÓETH-NE	57 000	0	0	0	0	2 000	59 000	0		Û
1 1 1 TRICHLOROETHANE	19 000	0	0			1 915	20 915	0		1800
1 1 1 IRICHLOROETHANE	46 000	0	0		0	3 700	49,700	0		3 700
1 1 1 TRICHLOROETHANE	11,000	0	10	0	0	12,000	23,010	0		0
1 2 DICHLOROETHANE	499	7,600	0	0	0	10	8,109	0	0	0 52 132
1 2 DICHLOROETHANE	499	10 0	250 0	0	0	52 132 10,150	52,891 18,590	10 150	ő	52 132
1 2 4-TRIMETHYLBENZENE 1 2 4 TRIMETHYLBENZENE	6,440 15,070	ŏ	0	ŏ	0	8,353	23,423	8,353	ŏ	ŏ
1 2 4 TRIMETHYLBENZENE	130,000	ŏ	ŏ	ŏ	ŏ	23,600	153,600	21,000	ŏ	ŏ
124 TRIMETHYLBENZENE	25,600	ō	ō	õ	õ	14,000	39,600	14,000	2 100	Ō
2 ETHOXYETHANOL	14,004	0	0	0	0	4,732	18,736	4,732	0	0
BARIUM	10	0	499	0	0	750	1,259	0	0	0
BARIUM COMPOUNDS	28,000	0	0	0	0	21,050	49,050	0	0	0
BENZENE	18,350	0	0	0	0	61,820	80,170	61,800	0	0
CARBON TETRACHLORIDE	499	6,500	0	0	0	10	7,009 610	0	0	0
CHLORINE	250 10	0	360 0	0	0	153 200	153,210	0	4,190	15 070
CHROMIUM	10	ŏ	5	ő	10	63,173	63,198	ŏ	-,130	69.840
CHROMIUM	5	· ŏ	5	ŏ	ő	37,742	37,752	õ	ō	38,696
CHROMIUM	ō	õ	ō	ō	Ō	28,000	28,000	0	0	27 000
CHROMIUM COMPOUNDS	85	0	5	0	5	359,600	359,695	0	0	359,740
CHROMIUM COMPOUNDS	147	0	36	0	0	15	198	0	0	15
CHROMIUM COMPOUNDS	250	0	250	0	0	165	665	10	0	10
CHROMIUM COMPOUNDS	499	0	0	0	0 0	0	499	0	0	0
CHROMIUM COMPOUNDS CHROMIUM COMPOUNDS	7,750 500	0	250 0	250 0	0	10,850 750	19,100 1,250	ŏ	0	ő
COPPER	5	ŏ	5	ŏ	ŏ	264,148	264,158	ŏ	ŏ	265 357
COPPER	10	ŏ	ŏ	ŏ	ō	100,330	100,340	ō	32,815	100,080
COPPER	5	Ō	5	Ō	0	255	265	0	0	0
COPPER	0	0	0	0	0	9,000	9,000	0	0	9,000
COPPER COMPOUNDS	41,618	0	5	1,665	0	1,665	44,953	0	0	0
COPPER COMPOUNDS	730	0	0	0	10	435,480	436,220	0	0	335 500
COPPER COMPOUNDS	27,000	0	1,900	10 225	0	55,000	83,900 58,652	0 20.531	0	0
COPPER COMPOUNDS COPPER COMPOUNDS	22,783 1,590	ŏ	5,113 249	10,225	10	20,531	1,849	20,031	ŏ	0
COPPER COMPOUNDS	961	ŏ	~~ 9	ŏ	0	ŏ	961	ŏ	ŏ	ő
COPPER COMPOUNDS	250	ŏ	ő	ŏ	ŏ	8,355	8.605	7.200	ŏ	ŏ
COPPER COMPOUNDS	499	õ	ō	õ	õ	0	499	0	ō	ō
COPPER COMPOUNDS	8,600	0	250	250	0	25,600	34,900	0	0	0
COPPER COMPOUNDS	250	0	0	0	0	15,000	15,250	0	0	15,000
COPPER COMPOUNDS	0	0	9	0	0	1,485	1,494	1,485	0	0
COPPER COMPOUNDS	499	499	500	0	10	1,651	3,159	0	0	0
COPPER COMPOUNDS CUMENE	1,200 499	0 3,600	999 0	0	999 0	4,800 10	7,998 4,109	0	0	0
DICHLOROMETHANE	21,000	3,000	ŏ	ŏ	ő	1,460	22,460	870	ŏ	Ö
DICHLOROMETHANE	27,000	ŏ	ŏ	ŏ	ŏ	4,000	31,000	4,000	ŏ	ŏ
DICHLOROMETHANE	3,400	1,200	10	ō	ō	250	4,860	0	ō	ō
DICHLOROTETRAFLUOROETHANE	250	0	0	0	0	0	250	0	0	0
ETHYLBENZENE	7,700	0	0	0	0	18,600	26,300	8,200	0	10,000
ETHYLBENZENE	2,050	0	0	0	0	710	2,760	700	170	0
ETHYLENE GLYCOL	250	0	0	0	0	4,600	4,850	0	0	0
ETHYLENE GLYCOL	1,200 499	0 499	0	0	0	3,600 10	4,800	0	0	0
ETHYLENE GYLCOL	31,735	499	0	ŏ	0	17,280	1,008 49,015	0	Ő	17,280
FREON 113 FREON 113	19,000	ŏ	0	0	ŏ	131,000	150,000	0	ő	130,000
FREON 113	11,000	ŏ	ŏ	ŏ	ŏ	5,600	16,600	ő	ŏ	0
GLYCOL ETHERS	31,430	ŏ	ŏ	ŏ	ŏ	25,380	56,810	25,380	ŏ	ŏ
ISOPROPYL ALCOHOL	1,882	9,264	ō	Ō	Ō	1,261	12,407	1,261	ō	ō
ISOPROPYL ALCOHOL (MANUFACTURING, ST	10,950	0	0	0	0	3,960	14,910	3,960	786	0
LEAD COMPOUNDS	250	0	113	0	0	2,473	2,838	0	0	1,726
LEAD COMPOUNDS	250	0	0	0	0	275	525	20	0	10
LEAD COMPOUNDS	250 9,200	0	250	0	0	16,650	17,150	0	0	20.000
MANGANESE	0,200 A74	0	0	0	0	20,850	30,050	0	0	20,900

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MANGANESE COMPOUNDS

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	1994 Form R 313 Data													
facility	Tono ét enical	Fug tive Or Non-Point Air Emissions (Ibs/year)	Point Ar Emission	Discharge to Streams or Is Bodies of Wate (Ibs/year)	r Landfill	t Discharge POTW	Transfers to as Other Off-sit Locations (Ibs/year)	Quantity Released	1994 Off-site Energy (lbs/year)	Recycling	Off-site Recycling	Treatment	Off-site	1994 Total Wastestrea (Ibs/year)
	MANGANESE COMPOUNDS	250		0 25	0 250) (0 0	750		0	0	0	0	750
NEWFORT NEWS SHIPBUILDING J RAY MCDERMOTT INC SHIPYARD	METHANOL	9,800	Ċ	0 0	0 0) (0 4 200	14,000	4 200		0	0	0	18 200 95 289
NEWPARK SHIPBUILDING & REP	METHANOL METHANOL	255 7,450		0 25	00			46,705 7,460			46 200 0	2 384 400	3	7,863
PLATZER SHIPYARD INC GUNDERSON INC	METHYL ETHYL KETONE	28,000	č	-	ō) (0 0	28,000	0		0	0	0	28,000
HALTER MARINE INC LOCKPOR	METHYL ETHYL KETONE	8,987	, c	-	0 0			12,251 13,187	3,264 2,638	3 365 0		0	0	18,880 15,825
HBC BARGE INC JEFFBOAT	METHYL ETHYL KETONE METHYL ETHYL KETONE	10,549 52,343						94,477	42,134	ŏ	ŏ	ŏ	ŏ	136,611
MOSS POINT MARINE INC	METHYL ETHYL KETONE	6,242	Ċ	, j	ō c) (5,754	11,996	5,754	0	0	0	0	17,750
ATLANTIC DRY DOCK CORP	METHYL ISOBUTYL KETONE	16,550			-			16,940 8,500	390 0	110	0	0	0	17,440 8,500
COLONNAS SHIPYARD INC NORSHIPCO CORP	METHYL ISOBUTYL KETONE METHYL ISOBUTYL KETONE	8,500 27,000						28,500	1,500	500	ŏ	ŏ	ō	30,500
PLATZER SHIPYARD INC	METHYL ISOBUTYL KETONE	14,000	999					15,009	0	0	0	6 330	3	15,018 41,993
PLATZER SHIPYARD INC	METHYL TERT-BUTYL ETHER METHYLENEBIS(PHENYLISOCYANATE)	41,650	0					41,660 D	0	0	0	0	Ő	41,555
MAKO MARINE INC NEWPORT NEWS SHIPBUIL DING	MOLYBDENUM TRIOXIDE	ŏ	10		5 Č	i č		10	0	0	0	0	0	10
ATLANTIC MARINE INC	N-BUTYL ALCOHOL	27,850	0					27,850 20,670	0 470	0 1,060	0	0	0	27 850 22 200
ATLANTIC MARINE INC BATH IRON WORKS CORP	N BUTYL ALCOHOL N BUTYL ALCOHOL	20,200 42,850						66,606	23,756	,,000	õ	ŏ	ō	90,362
BATH IRON WORKS CORP PORT	N BUTYL ALCOHOL	8,123	0	-) (10,587	2,464	0	0	0	0 4 000	13 051 36 300
BETHLEHEM STEEL CORP SABI	N BUTYL ALCOHOL N BUTYL ALCOHOL	28,000 13,310	0					32,300 16,852	1,100	0	ő	ŏ	4 000	17,952
CASCADE GENERAL INC COLONNAS SHIPYARD INC	N-BUTYL ALCOHOL	12,500	č) (ס כ) C) 0	12,500	0	0	0	0	0	12,500
GENERAL DYNAMICS CORP. ELE	N-BUTYL ALCOHOL	6,853	0		-			9,480 13,999	2,549 3,696	0 524	0	0	78 0	12,107 18,219
GRETNA MACHINE & IRON WORK INGALLS SHIPBUILDING INC	N-BUTYL ALCOHOL N-BUTYL ALCOHOL	10, 304 360,000							57,000	0	Ō	ŏ	7,000	488,000
JEFFBOAT	N-BUTYL ALCOHOL	33,834	0			0		33,834	0	0	0	0	0	33,834 15,100
J RAY MCDERMOTT INC SHIPYARD MOSS POINT MARINE INC	N-BUTYL ALCOHOL N-BUTYL ALCOHOL	8,100 11,841	0		-			11,600 22,856	3,500 11,015	ŏ	ŏ	ŏ	ŏ	33,871
NATIONAL STEEL & SHIPBUILD	N-BUTYL ALCOHOL	54,800	ō) 0			65,800	11,000	0	0	0	0	76,800
NEWPORT NEWS SHIPBUILDING	N-BUTYL ALCOHOL	55,000 25,000	0) 0 1 0			133,800 27,000	62,000 2,000	0 500	16,000 0	0	100 0	211,900 29,500
NORSHIPCO CORP NORSHIPCO & DRYDOCK CORP	N-BUTYL ALCOHOL N BUTYL ALCOHOL	15,000	ŏ		ο ŏ	Ō) 750	15,750	750	0	Ō	0	0	16,500
PLATZER SHIPYARD INC	N-BUTYL ALCOHOL	2,600	0) 0			2,610 11,970	0 667	0	0	70 0	4	2,684 12,637
TODD PACIFIC SHIPYARDS U S NAVY NORFOLK NAVAL SHIPYARD	N-BUTYL ALCOHOL N-BUTYL ALCOHOL	11,303 22,000	2,300		, U			48,305	007	1,600	ŏ	ő	22,000	69,905
BATH IRON WORKS CORP	NICKEL	5	0		5 0	0		62,437	0	0	67,502	0	0	129,939 48,850
BATH IRON WORKS CORP	NICKEL NICKEL	10 5	0					21,305 21,965	0	6,500 0	21,045 22,400	0	ŏ	46,000
BATH IRON WORKS CORP PORT GUNDERSON INC	NICKEL	ō	ō			Ó) 37,000	37,000	0	0	37,000	0	0	74,000
INGALLS SHIPBUILDING INC	NICKEL	250 697	0			0		250 741	0	0	0	0	0	250 741
GENERAL DYNAMICS CORP ELE GENERAL DYNAMICS CORP ELE	NICKEL COMPOUNDS NICKEL COMPOUNDS	356	ŏ			0		356	õ	ŏ	ō	ŏ	Ō	356
J. RAY MCDERMOTT INC SHIPYARD	NICKEL COMPOUNDS	499	0			0		499	0	0	0	0 150	0 17,000	499 73,850
NEWPORT NEWS SHIPBUILDING ACADIAN SHIPYARD INC	NICKEL COMPOUNDS PROPYLENE	39,000 500	0					56,700 500	0	ő	ŏ	0	0	500
BATH IRON WORKS CORP	PROPYLENE	57	Ó) 0	0		57	0	0	0	0	0	57
BATH IRON WORKS CORP PORT BETHLEHEM STEEL CORP BETH	PROPYLENE PROPYLENE	5 250	0) 0 1 0	0		5 250	0	0	0	0	0	5 250
BETHLEHEM STEEL CORP SABI	PROPYLENE	250	õ			0		250	0	0	0	0	0	250
ADMIRAL MARINE WORKS INC	STYRENE STYRENE	500 21,700	0			0		800 45,700	0 24,000	0	0	0	300 0	1,100 69,700
AVONDALE IND GRP DIV GENERAL DYNAMICS CORP ELE	STYRENE	378	ŏ			ŏ		408	0	ō	ō	ō	30	438
INTERMARINE USA	STYRENE	25.571	0		•	0		64,828	21,565 D	0	0	0	0	86,393 66,000
MAKO MARINE INC NEW ORLEANS SHIPYARD	STYRENE STYRENE	66,000 0	0		0 0	0		66,000 0	0	ŏ	ő	ő	ŏ	00,000
NEWPARK SHIPBUILDING & REP	STYRENE	255	ō			õ		47,130	0	0	46,625	2,406	0	96 161
PLATZER SHIPYARD INC	STYRENE SULFURIC ACID	6,850 950	0			0		6,860 18,680	0	0	0	480 0	3 2,700	7,343 21,380
INGALLS SHIPBUILDING INC U S NAVY NORFOLK NAVAL SHIPYARD	SULFURIC ACID	10	499	-		ŏ		2,209	ŏ	ō	ŏ	1,100	1,700	5,009
ALABAMA SHIPYARD INC	TOLUENE	19,363	0	-	0	0	-	19,383	0	0	0	0	0	19,363 19,865
ATLANTIC MARINE INC BOLLINGER SHIPYARDS INC	TOLUENE	11,155 19,000	0			0		14,305 20,300	3,150 0	2,410 0	1,300	ŏ	ő	21,600
GUNDERSON INC	TOLUENE	48,000	Ō	Ö	•	ō	9,250	57,250	9,000	20,000	0	Ó	90	86,340
INGALLS SHIPBUILDING INC J RAY MCDERMOTT INC SHIPYARD	TOLUENE	78,000 28,000	0	· 0	-	0		82,190 40,000	3,300 12,000	0	2,100 0	0	790 0	88,380 52,000
PLATZER SHIPYARD INC	TOLUENE	5,950	ō	ō	Ō	Ö	217,710	223,660	217,700	330	ō	220	3	441,913
TRINITY IND	TOLUENE	7,409 9,600	7,408		-	0		26,817 25,819	12,000	0	0	0	0 15,000	38,817 40,819
U S NAVY NORFOLK NAVAL SHIPYARD NEWPORT NEWS SHIPBUILDING	TOLUENE TRICHLOROETHYLENE	16,000	0	0	0	ō	1,350	17,350	ō	ō	1,100	Ō	100	18,550
PLATZER SHIPYARD INC		499	9,700	0	0	0	10	10,209	0	0	0	280	3	10,492

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Stepped Jers/Ship repair 1994 Form R 313 Data

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	1994 Form R 313 Data													
Facilit,	Tons chemical		Point Al Emissio	r Discharge to r Streams or ns Bodies of Water r) (Ibs/year)	Landifil		Transfers to s Other Off-sit Locations (ibs/year)	Quantity Released				1994 On site Treatmen (Ibs/year)		1994 Total 1 Wastestrea (Ibs/year)
U.S. NAVY NORFOLK NAVAL SHIPYARD	XYLENE	32,000	2.40	0 () 0)C	21,010	55,410	0	1 600	0	0	21 000	78 010
ALABAMA SHIPYARD INC	XYLENE (MIXED ISOMERS)	31,960				-				0			1,000	34 304
ALABAMA SHIPTARDINC ATLANTIC DRY DOCK CORP	XYLENE (MIXED ISOMERS)	37,750						38,535	785	220		-	ŏ	39 540
ATLANTIC MARINE INC	XYLENE (MIXED ISOMERS)	10,700	12,80	• •		-		23,970		1 190		õ	ō	25 630
ATLANTIC MARINE INC	XYLENE (MIXED ISOMERS)	123,535		0 C	i a				28 622	1 010		•	ŏ	181,789
		20,170				_			40,610	0	ŏ	-	ŏ	101,390
AVONDALE IND INC MAIN YA	XYLENE (MIXED ISOMERS)	13,758		0 C				21.380	7,625	ő	ň		ŏ	29,005
BATH IRON WORKS CORP	XYLENE (MIXED ISOMERS) XYLENE (MIXED ISOMERS)	96,000						110,000	1.025	ŏ	ŏ	•	•	124,000
BETHI EHEM STEEL CORP. BETH	XYLENE (MIXED ISOMERS)	19,000		0 0		-		22,020	3,000	440	ň		0.000	25,460
BETHLEHEM STEEL CORP SABI BOLLINGER QUICK REPAIR INC	XYLENE (MIXED ISOMERS)	12,000						12,250	0.000	0	400	-	ŏ	12,650
BOLLINGER GUICK REPAIR INC BOLLINGER SHIPYARDS INC	XYLENE (MIXED ISOMERS)	15,000				Ö		15,250	ŏ	ŏ	150		ŏ	15,400
BOLLINGER SHIPTARDS INC	XYLENE (MIXED ISOMERS)	15,000		0 0		ŏ	2,200	17,200	ŏ	ň	2 200		ŏ	19,400
CASCADE GENERAL INC	XYLENE (MIXED ISOMERS)	65,548		0 3,231		ŏ		76,168	927	ŏ	100	ŏ	ŏ	77.095
COLONNAS SHIPYARD INC	XYLENE (MIXED ISOMERS)	22,000		D 0,231		ő		22,000		ŏ	ŏ	ŏ	ŏ	22,000
EQUITABLE/HALTER	XYLENE (MIXED ISOMERS)	10,962		0 0		ŏ		13,153	2,191	ñ	ŏ	ŏ	ň	15.344
GENERAL DYNAMICS CORP. ELE	XYLENE (MIXED ISOMERS)	2,916			, o	ő		25.941	20,154	ŏ	ŏ	ŏ	2,871	48,966
GRETNA MACHINE & IRON WORK	XYLENE (MIXED ISOMERS)	15,281		o o	ŏ	ŏ		20.824	5,544	786	ŏ	õ	- i	27,154
GUNDERSON INC	XYLENE (MIXED ISOMERS)	70.000		0 0	ŏ	ŏ		70,250	76	0	ŏ	ŏ	ŏ	70,326
HALTER MARINE INC LOCKPOR	XYLENE (MIXED ISOMERS)	24,398	•		ŏ	ŏ		33,578	9,160	ō	ō	ō	ō	42,758
HALTER MARINE INC. MOSS PO	XYLENE (MIXED ISOMERS)	11,599			ŏ	ŏ		20,839	9,240	4 015	ō	ŏ	õ	34,094
HBC BARGE INC	XYLENE (MIXED ISOMERS)	18,846			ŏ	ŏ		23,558	4,711	0	ō	ō	õ	28 269
INGALLS SHIPBUILDING INC	XYLENE (MIXED ISOMERS)	69,000	97,00	n ö	ŏ	ō	14,360	180,380	9,000	ō	4,200	ō	1,200	194,780
INTERNATIONAL SHIP REPAIR AND MARINE SERVICES INC		18,722	0.,00		ŏ	ŏ	0	18,722	0	ō	0	ō	0	18,722
JEFFBOAT	XYLENE (MIXED ISOMERS)	51.678		ō õ	ŏ	ō	ŏ	51,678	ō	Ō	Ō	Ō	ō	51,678
J RAY MCDERMOTT INC SHIPYARD	XYLENE (MIXED ISOMERS)	13,000			ō	ō	5,500	18,500	5,500	Ō	Ō	Ő	ō	24,000
	XYLENE (MIXED ISOMERS)	17.067		ō ā	ō	ō	8,220	25,287	8,220	Ó	Ō	0	ō	33,507
	XYLENE (MIXED ISOMERS)	9,700	i	ō õ	ō	ō	5,700	15,400	5,700	1 000	Ō	Ō	Õ	22,100
	XYLENE (MIXED ISOMERS)	8,521		250	ō	Ō	48,150	56,921	0	0	48,150	2 502	0	107,573
	XYLENE (MIXED ISOMERS)	85,000	(0 0	0	0	224,450	309,450	210,000	0	14,000	0	410	534,210
	XYLENE (MIXED ISOMERS)	120.000	() 0	0	0	5,000	125,000	5,000	2 500	0	0	0	132,500
	XYLENE (MIXED ISOMERS)	20,000	() 0	0	0	2,000	22,000	2,000	0	0	0	0	24,000
PLATZER SHIPYARD INC	XYLENE (MIXED ISOMERS)	24,700	() 0	0	0	2,910	27,610	2,900	700	0	500	3	31,713
SAN FRANCISCO DRY DOCK SAN	XYLENE (MIXED ISOMERS)	13,898	() 0	0	0	0	13,896	0	0	0	0	0	13,896
TODD PACIFIC SHIPYARDS	XYLENE (MIXED ISOMERS)	8,917	() 0	0	0	469	9,386	469	0	0	0	0	9,855
	XYLENE (MIXED ISOMERS)	3,735	3,73	I 0	0	0	12,000	19,469	12,000	0	0	0	0	31,469
	XYLENE (MIXED ISOMERS)	17,650	(•	0	0	13,380	31,030	13,380	0	0	0	0	44,410
	XYLENE (MIXED ISOMERS)	14,128			0	0	8,639	22,765	8,575	0	0	0	0	31,340
	ZINC COMPOUNDS	5,007			499	0	250	6,006	0	0	0	0	0	6,006
	ZINC COMPOUNDS	16,033	(160	0	250	16,693	0	0	0	0	0	16,693
	ZINC COMPOUNDS	1,600	34,80	_	0	0	1,880	38,460	0	0	0	0	1,880	40,360
	ZINC COMPOUNDS	134			0	0	0	139	0	0	0	0	0	139
	ZINC COMPOUNDS	37,000			0	0	48,000	86,400	0	0	0	0	28,000	114 400
	ZINC COMPOUNDS	3,842			3,072	0	3,911	12,382	3,911	0	0	0	0	16,273
	ZINC COMPOUNDS	6,000	(0	0	214,974	221,224	13,000	0	200,000	500	1,600	436,324
	ZINC COMPOUNDS	14,000	(0	0	29,000	43,000	29,000	0	0	0	0	72 000
	ZINC COMPOUNDS	36,250			5	0	59,850	96,355	0	0	0	120	41,000	137,475
	ZINC COMPOUNDS	250	9		0	0	0	250	0	Ő	0	0	1.000	1,250
	ZINC (FUME OR DUST)	499	9		0	0	7,956	8,455	7,956	0	0	0	0	16,411
	ZINC (FUME OR DUST)	499	(0	0	9,240	9,739	9,240	0	0	0	0	18,979
	ZINC (FUME OR DUST)	•		-	0		235,300	235,300	0	0	-	•	0	235,300
	ZINC (FUME OR DUST)	5			0	õ	24,989	24,994	24,989	0	0	0	0 P	49,983
	ZINC (FUME OR DUST)	500 499	(••	0	5	22,100	22,622		Ű	16 800	25	5	39,452
	ZINC (FUME OR DUST) ZINC (FUME OR DUST)	499	L L	-	0	0	1,649	2,148 499	12,000	0	12,100	0	0	14,148 12,599
TRINITY MARINE GROUP MADIS	2110 [1 0m2 01 0001]	-100		, U	U	U	U	408	U	J	12,100	U	J	12,099

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St. pbuilders/St. p repair 1994 Form R 313 Data

1994 Form R 313 Data							81						
Tone Chemical	Or Non-Point Air Emissions	Point Air Emissions	Discharge to Streams or Bodies of Water (Ibs/year)	Landfil	Discharges POTW	Transfers to Other Off-sit Locations (Ibs/year)	1994 Quantity Released		1994 On-site Recycling (lbs/year)	1994 Off-site g Recycling (lbs/year)	1994 On-site Treatmen (ibs/year)	1994 Off-site I Treatmen (Ibs/year)	1994 Total t Wastestrea (lbs/year)
IONG CREInical	(103) (00)	(((
PROPYLENE	500	0	0	-		0		0					
STYRENE	500	0	0			300		0					
ISOPROPYL ALCOHOL	1,882	9,264 0	0			1,261		1,261	-				
TOLUENE	19,363 31,960	0	0			1,172		1,172	-				
XYLENE (MIXED ISOMERS) ZINC COMPOUNDS	5.007	ő	250			250		0	-				
METHYL ISOBUTYL KETONE	18,550	ŏ	0			390		390					17,440
XYLENE (MIXED ISOMERS)	37,750	Ō	0			785		785					
COPPER COMPOUNDS	41,618	0	5			1,665		0					44,953
N-BUTYL ALCOHOL	20,200	0	0			470		470			0	0	22,200 27,850
N BUTYL ALCOHOL	27,850	0	0	0 0		0 3,150		3,150	-	-	0		19.865
TOLUENE	11,155 10,700	12,800	0	ŏ	0	470		470			ŏ	ő	25,630
XYLENE (MIXED ISOMERS) XYLENE (MIXED ISOMERS)	123,535	12,000	ŏ	ŏ	ŏ	28,622		28,622					181,789
ZINC COMPOUNDS	1.800	34,800	ō	ō	ō	1,880		0		0	0	1,880	40,360
ZINC COMPOUNDS	16,033	· 0	250	160	0	250		0	0			0	16,693
STYRENE	21,700	0	0	0	0	24,000		24,000				0	69,700
1 2 4-TRIMETHYLBENZENE	6,440	0	0	0	0	10,150	16,590	10,150	0	-	0	0 3	26,740 719,438
CHROMIUM COMPOUNDS	85 730	· 0	5 0	0	5 10	359,600 435,480		0			ő	0	771,720
COPPER COMPOUNDS GLYCOL ETHERS	31,430	ŏ	ŏ	ŏ	Ö	25,380	56,810	25,380			ŏ	ŏ	82,190
XYLENE (MIXED ISOMERS)	20,170	ŏ	ō	ō	ō	40,610		40,610		Ō	ō	Ď	101,390
ZINC COMPOUNDS	134	ō	5	Ō	Ő	0	139	0	0		0	0	139
1,2,4-TRIMETHYLBENZENE	15,070	0	0	0	0	8,353	23,423	8,353	0		0	0	31,776
CHROMIUM	10	0	0	0	0	153,200		0	4,190		0	0	172,470
CHROMIUM	10	0	5 5	0	10 0	63,173 264,148	63,198 264,158	0	0	69,840 265,357	0	0	133,038 529,515
COPPER COPPER	5 10	ň	5	ŏ	0	100.330	100.340	ő			ŏ	ŏ	233,235
N-BUTYL ALCOHOL	42,850	ŏ	ŏ	ō	ŏ	23,756	66,606	23,758	0	0	õ	ō	90,362
NICKEL	5	ō	5	Ō	Ō	62,427	62,437	0	Ō	67,502	Ō	0	129,939
NICKEL	10	0	0	0	0	21,295	21,305	0	6,500		0	0	48,850
PROPYLENE	57	0	0	0	0	0	57	0	0	0	0	0	57
XYLENE (MIXED ISOMERS)	13,756	0	0	0	0	7,624	21,380	7,625	0	0	0	0	29,005 23,468
2-ETHOXYETHANOL	14,004	0	05	0	0	4,732 37,742	18,736 37,752	4,732	0	38,696	0	Ŭ	76,448
CHROMIUM COPPER	5	ŏ	5	ŏ	ŏ	255	265	ŏ	ŏ	0	ŏ	ŏ	265
N-BUTYL ALCOHOL	8,123	ŏ	ŏ	ŏ	ŏ	2,484	10,587	2,464	ŏ	ō	ŏ	ō	13,051
NICKEL	5	Ő	5	Ő	0	21,955	21,965	0	0	22,400	0	0	44,365
PROPYLENE	5	0	0	0	0	0	5	0	0	0	0	0	5
COPPER COMPOUNDS	27,000	0	1,900	0	0	55,000	83,900	0	0	0	0	20,000	103,900
PROPYLENE	250 96,000	0 0	0	0	0	0 14.000	250 110.000	0	0	0	0	0 14,000	250 124,000
XYLENE (MIXED ISOMERS) ZINC COMPOUNDS	37,000	ŏ	1,400	ő	ŏ	48,000	86,400	0	ŏ	ŏ	0	28,000	114,400
N-BUTYL ALCOHOL	28,000	ŏ	1,100	ŏ	ŏ	4,300	32,300	ŏ	ŏ	ŏ	ŏ	4,000	36,300
PROPYLENE	250	ŏ	ŏ	ō	ŏ	0	250	ŏ	ŏ	ŏ	ŏ	0	250
XYLENE (MIXED ISOMERS)	19,000	ō	Ō	Ō	ō	3,020	22,020	3,000	440	Ō	Ō	Ō	25,460
XYLENE (MIXED ISOMERS)	12,000	0	0	0	0	250	12,250	0	0	400	0	0	12,650
TOLUENE	19,000	0	0	0	0	1,300	20,300	0	0	1,300	0	0	21,600
XYLENE (MIXED ISOMERS)	15,000	0	0	0	0	2,200 250	17,200 15,250	0	0	2,200 150	0	0	19,400 15,400
XYLENE (MIXED ISOMERS) BARIUM	15,000 10	0	499	0	ő	250	1,259	0 0	ő	150	0	0	1,259
MANGANESE	9,200	ŏ	755	ŏ	ŏ	20,850	30,050	ŏ	ŏ	20,900	ŏ	ŏ	50,950
COPPER COMPOUNDS	22,783	ŏ	5,113	10,225	ŏ	20,531	58,652	20,531	ŏ	10,000	ŏ	ŏ	79,183
N-BUTYL ALCOHOL	13,310	ō	1,221	1,221	ō	1,100	16,652	1,100	ō	ō	ŏ	ō	17,952
XYLENE (MIXED ISOMERS)	65,548	0	3,231	6,462	0	927	78,168	927	0	0	0	0	77,095
ZINC COMPOUNDS	3,642	0	1,537	3,072	0	3,911	12,362	3,911	0	0	0	0	16,273
METHYL ISOBUTYL KETONE	8,500	0	0	0	0	0	8,500	0	0	0	0	0	8,500
N-BUTYL ALCOHOL	12,500	0	0	0 0	0	0	12,500	0	0	0	0	0	12,500
XYLENE (MIXED ISOMERS) XYLENE (MIXED ISOMERS)	22,000 10, 962	0	0	Ő	0	0 2,191	22,000 13,153	0 2,191	ŏ	0	0	0	22,000 15,344
CHROMIUM COMPOUNDS	147	ŏ	36	ŏ	ŏ	15	198	2,101	ŏ	15	ŏ	ŏ	213
COPPER COMPOUNDS	1,590	ŏ	249	ŏ	10	Ö	1,849	ň	ŏ	ö	ŏ	ŏ	1,849
COPPER COMPOUNDS	961	ŏ	10	ŏ	Ö	ŏ	961	ŏ	ŏ	ŏ	ŏ	ŏ	961
FREON 113	31,735	õ	õ	ō	ŏ	17,280	49,015	õ	õ	17,280	õ	ŏ	66,295
LEAD COMPOUNDS	250	Ó	113	0	0	2,473	2,836	Ő	0	1,726	0	747	5,309
MANGANESE COMPOUNDS	912	0	0	0	0	0	912	0	0	0	0	0	912
MANGANESE COMPOUNDS	402	0	0	0	0	0	402	0	0	0	0	0	402
N-BUTYL ALCOHOL	6,653 358	0	0	0	0	2,627	9,480	2,549	0	0	0	78 0	12,107
NICKEL COMPOUNDS NICKEL COMPOUNDS	300	ů	34	0	10	0	358 741	0	0	0	0	0	356 741
STYRENE	378	Ğ		ŏ	0	30	408	ő	ő	ŏ	ŏ	30	438
		-	•	-	-			-	•	-	-		

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ACADIAN SHIPYARD INC ADMIRAL MARINE WORKS INC ALABAMA SHIPYARD INC ATLANTIC DRY DOCK CORP ATLANTIC DRY DOCK CORP ATLANTIC MARINE INC AVONDALE IND GRP DIV AVONDALE IND INC MAIN YA BATH IRON WORKS CORP PORT BETHLEHEM STEEL CORP BETH BETHLEHEM STEEL CORP BETH BETHLEHEM STEEL CORP BETH BETHLEHEM STEEL CORP BETH BETHLEHEM STEEL CORP BABI BETHLEHEM STEEL CORP SABI BETHLEHEM STEEL CORP SABI BETHLEHEM STEEL CORP SABI BOLLINGER QUICK REPAIR INC BOLLINGER SHIPYARDS INC BOLLINGER SHIPYARDS INC BOLLINGER SHIPYARDS INC BOLLINGER SHIPYARDS INC BROWN & ROOT INC MARINE F BROWN & ROOT INC MARINE F CASCADE GENERAL INC COLONNAS SHIPYARD INC COLONNAS SHIPYARD INC COLONNAS SHIPYARD INC COLONNAS SHIPYARD ING EQUITABLE/HALTER GENERAL DYNAMICS CORP ELE GENERAL DYNAMICS CORP ELE

	1994 Form R 313 Data													
		E	Steel Or	Discharge to	Releases		Transfers to	81	1994	1994	1594	1994	1994	1994
		Fugitiva Or Non-Point					s Other Off-sit			On-site	Off-site	On-site	Off-site	Total
		Air Emissions	Emission	is Bodies of Wale	r Landfill	POTW	Locations	Released	Energy					Wastestrea
Faculty	Tuxic Chemical	(Ibs/year)	(ibs/year)) (los/year)	(ibs/year)	(ibs/year)	(ibs/year)	(ibs/yer)	(lbs/year)	(ibs/year)	(lbs/year)	(ibs/year)	(ibs/year)	(IDs/year)
GENER-I DYNAMICS CORP ELE	XYLENE (MIXED ISOMERS)	2,916)) () 23 025	25,941	20,154	0	0	0	2 871	48 966
GRETNA MACHINE & IRON WORK	MANGANESE	474		-						Ō	Ō	ō	0	474
GRETNA MACHINE & IRON WORK	N-BUTYL ALCOHOL	10,304	Q) (0	-	0	18,219
GRETNA MACHINE & IRON WORK	XYLENE (MIXED ISOMERS)	15,281	9		0 0					786 0	0	0	0 2,000	27,154 61,000
GUNDERSON INC	1.1.1-TRICHLOROETHANE	57,000	0							0	27,000	0	2,000	55,000
GUNDERSON INC GUNDERSON INC	CHROMIUM COPPER	0	0		, i					ŏ	9,000	ŏ	ō	18,000
GUNDERSON INC	MANGANESE	250	č		5 d					Ō	230,000	Ō	0	460,250
GUNDERSON INC	METHYL ETHYL KETONE	28,000	0) (28,000	0	0	0	0	0	28,000
GUNDERSON INC	NICKEL	0	0	-		0			0 9,000	0 20,000	37,000 0	0	0 90	74,000 86,340
GUNDERSON INC	TOLUENE XYLENE (MIXED ISOMERS)	48,000 70,000	0) () (76	20,000	ŏ	ő	0	70,326
GUNDERSON INC HALTER MARINE INC LOCKPOR	ISOPROPYL ALCOHOL (MANUFACTURING, ST	10,950	ŏ	-	j ŭ	ŏ				786	ŏ	ō	ŏ	19,656
HALTER MARINE INC LOCKPOR	METHYL ETHYL KETONE	8,987	Ō) Č) a	0		12,251	3,264	3,365	0	0	0	18,880
HALTER MARINE INC. LOCKPOR	XYLENE (MIXED (SOMERS)	24,398	0) 0	0		33,578	9,180	0	0	0	0	42,758
HALTER MARINE INC LOCKPOR	ZINC (FUME OR DUST)	499	0	-		0		8,455 20,639	7,956 9,240	0 4.015	0	0	0	16,411 34,094
HALTER MARINE INC MOSS PO HALTER MARINE INC MOSS PO	XYLENE (MIXED ISOMERS) ZINC (FUME OR DUST)	11,599 499	ŏ		í a	Ö		9,739	9,240	1,010	ŏ	ŏ	ŏ	18,979
HBC BARGE INC	METHYL ETHYL KETONE	10,549	Ő	i i	Ō	Ō		13,187	2,638	0	0	0	0	15,825
HBC BARGE INC	XYLENE (MIXED ISOMERS)	18,848	0		0	0		23,558	4,711	0	0	0	0	28,269
INGALLS SHIPBUILDING INC	1 1,1-TRICHLOROETHANE	19,000	0		. –	0			0 21,000	0	1,800	0	120 2,600	22,835 177,200
INGALLS SHIPBUILDING INC INGALLS SHIPBUILDING INC	1,2,4-TRIMETHYLBENZENE CHLORINE	130,000 250	0	-	-	0		610	21,000	ŏ	ŏ	ő	430	1.040
INGALLS SHIPBUILDING INC	CHROMIUM COMPOUNDS	250	ŏ			ō		665	10	õ	10	500	10	1,195
INGALLS SHIPBUILDING INC	COPPER COMPOUNDS	250	0		0	0		6,605	7,200	0	0	500	900	17.205
INGALLS SHIPBUILDING INC	DICHLOROMETHANE	21,000	0	0	0	0		22,460	870	0	0 10	0 500	220 10	23,550 1,065
INGALLS SHIPBUILDING INC INGALLS SHIPBUILDING INC	LEAD COMPOUNDS MANGANESE COMPOUNDS	250 250	0			0		525 250	20 0	0	0	500	0	250
INGALLS SHIPBUILDING INC	N-BUTYL ALCOHOL	360,000	ŏ	ŭ	ŏ	õ	-		57,000	ō	ō	õ	7,000	488,000
INGALLS SHIPBUILDING INC	NICKEL	250	Ó	0	0	0		250	0	0	0	0	0	250
INGALLS SHIPBUILDING INC	SULFURIC ACID	950	0	0	-	0		18,650	0 2 200	0	0 2,100	0 0	2,700 790	21,380 88,380
INGALLS SHIPBUILDING INC	TOLUENE XYLENE (MIXED ISOMERS)	76,000 69,000	0 97,000	0		0	-,	82,190 160,380	3,300 9,000	0	4,200	ő	1,200	194,780
INGALLS SHIPBUILDING INC INGALLS SHIPBUILDING INC	ZINC COMPOUNDS	6,000	0,000	250	ŏ	ŏ		221,224	13,000	ō	200,000	500	1,600	436,324
INTERMARINE USA	STYRENE	25,571	Ō	0	0	0	39,257	64,828	21,565	0	0	0	0	86,393
INTERNATIONAL SHIP REPAIR AND MARINE SERVICES INC	XYLENE (MIXED ISOMERS)	18,722	0	0	0	0	-	18,722	0	0	Ő	0	0	18,722
JEFFBOAT	MANGANESE METHYL ETHYL KETONE	1,865 52,343	0	U 0	0	0	-	1,865 94,477	0 42,134	0	0	0	0	1,865 136,611
JEFFBOAT JEFFBOAT	N-BUTYL ALCOHOL	33,834	ŏ	ŏ	ŏ	ŏ		33,834	42,104	ŏ	ŏ	ŏ	ŏ	33,834
JEFFBOAT	XYLENE (MIXED ISOMERS)	51,678	õ	ō	Ö	Ō	Ō	51,678	Ō	Ó	0	0	0	51,678
JEFFBOAT	ZINC (FUME OR DUST)	0	0	0	0	0	235,300	235,300	0	0	0	0	0	235,300
J RAY MCDERMOTT INC SHIPYARD	CHROMIUM COMPOUNDS COPPER COMPOUNDS	499 499	0	0	0	0	0	499 499	0	0	0	0	0	499 499
J RAY MCDERMOTT INC SHIPYARD J RAY MCDERMOTT INC SHIPYARD	MANGANESE COMPOUNDS	499	ŏ	0	ŏ	ŏ	ŏ	499	ő	ŏ	ŏ	ŏ	ŏ	499
J RAY MCDERMOTTING SHIPYARD	METHANOL	9,800	ō	ŏ	ŏ	ō	4,200	14,000	4,200	ō	ō	ō	ō	18,200
J RAY MCDERMOTT INC SHIPYARD	N-BUTYL ALCOHOL	8,100	0	0	0	0	3,500	11,600	3,500	0	0	0	0	15,100
	NICKEL COMPOUNDS	499	0	0	0	0	0 12,000	499	12 000	0	0	0	0	499 52,000
	TOLUENE XYLENE (MIXED ISOMERS)	28,000 13,000	ŏ	0	ŏ	ő	5,500	40,000 18,500	12,000 5,500	ő	ŏ	Ö	0	24,000
	ZINC COMPOUNDS	14,000	ŏ	ō	ō	ŏ	29,000	43,000	29,000	ŏ	õ	ō	ō	72,000
MAKO MARINE INC	METHYLENEBIS(PHENYLISOCYANATE)	0	0	0	0	0	0	0	0	0	0	0	0	0
	STYRENE	68,000	0	0	0	0	6 764	66,000	6 764	0	0	0	0	66,000
	METHYL ETHYL KETONE N-BUTYL ALCOHOL	6,242 11,841	Ö	0	ŏ	0	5,754 11,015	11,996 22,856	5,754 11,015	ň	0	ŏ	0	17,750 33,871
	XYLENE (MIXED ISOMERS)	17,067	ŏ	ŏ	ŏ	ŏ	8,220	25,287	8,220	ŏ	ŏ	ŏ	ŏ	33,507
	ZINC (FUME OR DUST)	5	ō	Ō	Ō	Ō	24,989	24,994	24,989	Ō	Ó	Ó	Ó	49,983
	1,2,4-TRIMETHYLBENZENE	25,600	0	0	0	0	14,000	39,600	14,000	2,100	0	0	0	55,700
	N-BUTYL ALCOHOL XYLENE (MIXED ISOMERS)	54,800 9,700	0	0	0	0	11,000 5,700	65,600 15,400	11,000	0 1,000	0	0	0	76,800
	ZINC (FUME OR DUST)	500	ŏ	17	ŏ	5	22,100	22,622	5,700 0	1,000	16,800	25	5	22,100 39,452
	STYRENE	õ	ŏ	0	ŏ	ŏ	0	0	ŏ	ŏ	0	0	ŏ	0
NEWPARK SHIPBUILDING & REP	1,2-DICHLOROETHANE	499	10	250	0	Ő	52,132	52,891	0	Ō	52,132	2,492	0	107,515
	METHANOL	255	0	250	0	0	46,200	46,705	0	0	48,200	2,384	0	95,289
	STYRENE XYLENE (MIXED ISOMERS)	255 8,521	0	250 250	0	0	46,625 48,150	47,130 56,921	0	0	46,625 48,150	2,406 2,502	0	96,161 107,573
	1,1,1-TRICHLOROETHANE	48,000	ŏ	2 50 0	ő	ŏ	3,700	49,700	0	ŏ	3,700	2,502	100	53,500
NEWPORT NEWS SHIPBUILDING	BARIUM COMPOUNDS	28,000	ŏ	ō	Õ	ŏ	21,050	49,050	õ	ŏ	0	Ō	21,000	70,050
	CHROMIUM COMPOUNDS	7,750	0	250	250	0	10,850	19,100	0	0	0	1,500	11,000	31,600
	COPPER COMPOUNDS DICHLOROMETHANE	8,800 27,000	0	250 0	250 0	0	25,600	34,900 31,000	0 4,000	0	0	100	25,000 0	60,000 35,000
	DICHLOROMETHANE	27,000	ŏ	0	ŏ	ő	4,000 0	250	4,000	0	0 0	0	0	250
			-	•	-	-	-		-	-	-	-	-	

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Shiptuilders/Shiprepar

Shipbuilders/Shiprepar 1994 Form R 313 Data

	1994 Form R 313 Data							81						
Faulty	Толе Спетса	Fugitive Or Non-Point Air Emissions (lbs/year)	Point Air Emission	Discharge to Streams or Is Bodies of Water (Ibs/year)	Landfil		Transfers to s Other Off-sit Locations (ibs/year)	1994 Quantily Released	1994 Off-site Energy (lbs/year)	Recycling			1994 Off-site at Treatment (ibs/year)	1994 Total t Wastestrea (ibs/year)
NEWPORT NEWS SHIPBUILDING	ETHYLBENZENE	7,700	() () 0) 0	18,600	26,300	8,200	0	10 000	0	0	44,500
NEWPORT NEWS SHIPBUILDING	ETHYLENE GLYCOL	250				-					0	-	130	
NEWPORT NEWS SHIPBUILDING	FREON 113	19,000) õ					Ō	130 000		-	280,000
NEWPORT NEWS SHIPBUILDING	LEAD COMPOUNDS	250	i c	250) Ö) Ó	18,650	17,150	0	0	0	90	320	17,560
NEWPORT NEWS SHIPBUILDING	MANGANESE COMPOUNDS	250	- C) 250	250	0	0 0	750		0	0	0		750
NEWPORT NEWS SHIPBUILDING	MOLYBDENUM TRIOXIDE	0			-	-	-	10	-	•	0	0		10
NEWPORT NEWS SHIPBUILDING	N-BUTYL ALCOHOL	55,000			-					0	16,000	0		211,900
NEWPORT NEWS SHIPBUILDING	NICKEL COMPOUNDS	39,000				0				0	0	150		73,850
NEWPORT NEWS SHIPBUILDING	TRICHLOROETHYLENE	16,000		-	-					0	1,100 14.000	0		18,550 534,210
NEWPORT NEWS SHIPBUILDING	XYLENE (MIXED ISOMERS)	85,000			-	0					14,000	120		137,475
NEWPORT NEWS SHIPBUILDING	ZINC COMPOUNDS CHROMIUM COMPOUNDS	36,250 500					750	1.250		ŏ	ŏ	120		1,255
NORSHIPCO CORP NORSHIPCO CORP	COPPER COMPOUNDS	250	ŏ		0	0		15,250	ŏ	ő	15,000	ŏ		31,250
NORSHIPCO CORP	METHYL ISOBUTYL KETONE	27.000	ŏ	•	Ŏ	ŏ		28,500	1,500		0,000	ŏ		30,500
NORSHIPCO CORP	N-BUTYL ALCOHOL	25,000	ŏ	-	ō	ō		27,000	2,000	500	Ō	ō	Ō	29,500
NORSHIPCO CORP	XYLENE (MIXED ISOMERS)	120,000	ō	Ō	Ō	Ő	5,000	125,000	5,000	2,500	0	0	0	132,500
NORSHIPCO CORP	ZINC COMPOUNDS	250	Ó) 0	0	0	0	250	0	0	0	0	1,000	1,250
NORSHIPCO & DRYDOCK CORP	N-BUTYL ALCOHOL	15,000	0		0	0		15,750	750	0	0	0	0	16,500
NORSHIPCO & DRYDOCK CORP	XYLENE (MIXED ISOMERS)	20,000	· 0		0	0	-,	22,000	2,000	0	0	0	0	24,000
PLATZER SHIPYARD INC	1.2 DICHLOROETHANE	499	7,600		0	0		8,109	0	0	0	120		8,232
PLATZER SHIPYARD INC	BENZENE	18,350	0	-	0	0		80,170	61,800	0	0	330		142,304
PLATZER SHIPYARD INC	CARBON TETRACHLORIDE	499	6,500		Ű	0	10 10	7,009	0	0	0	120 165		7,132 4,277
PLATZER SHIPYARD INC		2.050	3,600		0	0	710	2,760	700	170	0	65		3.698
PLATZER SHIPYARD INC PLATZER SHIPYARD INC	ETHYLBENZENE ETHYLENE GYLCOL	499	499		ŏ	ŏ		1.008			ŏ	200		1,211
PLATZER SHIPTARD INC	METHANOL	7.450	0		ŏ	ŏ	10	7,460	ŏ	ŏ	ŏ	400	3	7.863
PLATZER SHIPYARD INC	METHYL ISOBUTYL KETONE	14,000	990		ŏ	õ	10	15,009	ō	ŏ	ō	6	3	15,018
PLATZER SHIPYARD INC	METHYL TERT-BUTYL ETHER	41,650	Ő		ō	ō	10	41,660	Ō	Ō	Ó	330	3	41,993
PLATZER SHIPYARD INC	N-BUTYL ALCOHOL	2,600	Ö	0	0	0	10	2,610	0	0	0	70	- 4	2,684
PLATZER SHIPYARD INC	STYRENE	6,850	0	0	0	0	10	6,860	0	0	0	480	3	7,343
PLATZER SHIPYARD INC	TOLUENE	5,950	0	0	0	0	217,710	223,660	217,700	330	0	220	3	441,913
PLATZER SHIPYARD INC	VINYL ACETATE	499	9,700	0	0	0	10	10,209	0	0	0	280	3	10,492
PLATZER SHIPYARD INC	XYLENE (MIXED ISOMERS)	24,700	0	0	0	0	2,910	27,610	2,900	700	0	500	3	31,713
SAN FRANCISCO DRY DOCK SAN	COPPER COMPOUNDS	0	0		0	0	1,485	1,494	1,485	0	0	0	0	2,979
SAN FRANCISCO DRY DOCK SAN	XYLENE (MIXED ISOMERS)	13,896	0 499	0 500	ŏ	0 10	0 1,651	13,898 3,159	0	0		0	2,468	13,896 5,627
TODD PACIFIC SHIPYARDS TODD PACIFIC SHIPYARDS	COPPER COMPOUNDS N-BUTYL ALCOHOL	499 11,303		500	ŏ	10	667	11.970	667	0	Ň	0	2,400	12,637
TODD PACIFIC SHIPYARDS	XYLENE (MIXED ISOMERS)	8,917	ŏ	•	ŏ	ŏ	469	9.385	469	ŏ	ŏ	ŏ	ŏ	9,855
TRINITY IND	TOLUENE	7,409	7,408	õ	ŏ	ŏ	12,000	26.817	12,000	ŏ	ŏ	õ	ŏ	38,817
TRINITY IND	XYLENE (MIXED ISOMERS)	3,735	3,734	ŏ	õ	ŏ	12.000	19,469	12,000	ō	ō	ō	ō	31,469
TRINITY IND	ZINC (FUME OR DUST)	499	0	Ō	Ó	Ó	1,649	2,148	12,000	0	0	0	0	14,148
TRINITY IND INC	XYLENE (MIXED ISOMERS)	17,650	0	0	0	0	13,380	31,030	13,380	0	0	0	0	44,410
TRINITY MARINE GROUP MADIS	MANGANESE	23	0	0	0	0	0	23	0	0	0	0	0	23
TRINITY MARINE GROUP MADIS	ZINC (FUME OR DUST)	499	0	0	0	0	0	499	0	0	12,100	0	0	12,599
TRINITY MARINE PORT ALLEN	XYLENE (MIXED ISOMERS)	14,126	0	0	0	0	8,639	22,765	8,575	0	0	0	0	31,340
U S NAVY NORFOLK NAVAL SHIPYARD	1,1,1-TRICHLOROETHANE	11,000	0	10	0	0	12,000	23,010	0	Ō	0	0	12,000	35,010
U S NAVY NORFOLK NAVAL SHIPYARD	COPPER COMPOUNDS	1,200	0	999	0	999	4,800	7,998	0	<u>o</u>	0	0	4,800	12,798
U.S. NAVY NORFOLK NAVAL SHIPYARD	DICHLOROMETHANE	3,400	1,200	10	0	0	250	4,860	0	Ő	0	0	490	5,350
U.S. NAVY NORFOLK NAVAL SHIPYARD	ETHYLENE GLYCOL	1,200 11,000	0	0	0	0	3,600	4,800	0	0	0	0	3,600 5,600	8,400
U S NAVY NORFOLK NAVAL SHIPYARD U S NAVY NORFOLK NAVAL SHIPYARD	FREON 113 N-BUTYL ALCOHOL	22,000	2.300	0	ő	Ŭ	5,600 22,005	16,600 46,305	0	1,600	0	0	22,000	22,200 69,905
U S NAVY NORFOLK NAVAL SHIPTARD	SULFURIC ACID	22,000	499	0	ŏ	0	1,700	2,209	0	1,000	ŏ	1,100	1,700	5,009
U S NAVY NORFOLK NAVAL SHIFTARD	TOLUENE	9.800	900	10	ő	Ď	15,010	25.819	0	ő	ŏ	0,100	15,000	40,819
U S NAVY NORFOLK NAVAL SHIPYARD	XYLENE	32,000	2,400	.0	ŏ	ŏ	21,010	55,410	ŏ	1,600	ŏ	ŏ	21,000	78,010
		02,000	-,00	Ŭ	Ŭ	U	~1,010	00,7,0	U	1,000			- 1,000	10,010

-36

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