



DOW CHEMICAL U.S.A.

JANUARY 11, 1985

LOUISIANA DIVISION
P. O. BOX 150
PLAQUEMINE, LOUISIANA 70785-0150
804 389-8000HUGO ANDRICAIN
TONY GRANT
D. R. FABRE
SHIFT SUPERVISORS
BULLETIN BOARD
DANNIE KENNEDY
ELAYNE HYATTDISTR. SERVICES
MARINE
MARINE
MARINE
DOCK #1
INDUSTRIAL HYGIENE
SAFETY SUPERINTENDENT

FOR YOUR INFORMATION, ATTACHED ARE PERSONNEL EXPOSURE LEVELS, SHOWN
IN PARTS PER MILLION, FROM BARGE LOADING AND SHIP DISCONNECT OPERATIONS
IN 1984. SAMPLES WERE TAKEN WITH PERSONNEL MONITORING PUMPS. TLV'S
LISTED ARE MAXIMUM ALLOWABLE EXPOSURES.

J. L. Moreau, Jr.
J. L. MOREAU, JR.
INDUSTRIAL HYGIENE
RAILROAD/MARINE

lrj

MARINE

TIME WEIGHTED AVERAGES - PERSONNEL - BARGES

METHYLENE CHLORIDE TLV-100	CHLOROFORM TLV-10	ETHYLENE DICHLORIDE TLV-10	CARBON TETRACHLORIDE TLV-5	METHANOL TLV-200	BENZENE TLV-10	BUTADIENE TLV-50	BENZENE (IN FUEL OIL) TLV-10
9.02	<1.12	3.84	<0.99	<2.73	1.85	0.05	<0.07
<1.73	<1.15	<1.30	<0.91	<2.49	29.98	5.21	<0.12
<1.81	<1.10	1.07	<1.00	<2.80		<0.10	<0.09
	15.57		5.39		12.35	0.45	0.06
3.10		1.86			6.61		0.09
2.08		3.30				2.63	0.08
					<1.10	22.31	
		<1.16			<1.16	22.70	0.27
		<1.78				7.45	1.02
		<1.87			8.27		0.36
		<1.43			2.97	0.08	
						<0.07	0.18
					21.29	<0.06	0.27
					19.44	<0.08	<0.13
						6.76	0.31
						<0.11	<0.24
						12.46	6.90
						4.80	
						2.66	
						0.16	

MARINE

15 MIN. EXCURSIONS - PERSONNEL - BARGES

<u>METHYLENE CHLORIDE TLV-500</u>	<u>CHLOROFORM TLV-50</u>	<u>ETHYLENE DICHLORIDE TLV-15</u>	<u>BENZENE TLV-10</u>
*1 - VOID	*2 - VOID	*5 - VOID	<0.02
			1.04
			0.04
			0.01
			0.45
			0.16
			0.06
			3.67
			5.41
			1.08
			5.77
			*5 - VOID

*VOID - ANALYSIS LIMIT OF DETECTION TOO HIGH

MARINE

LOADING
AREA SAMPLES - BARGES

BENZENE
TLV-10

0.20
2.95
1.60
33.65

0.00
4.15
23.20
20.43

< 1.04

1.63
18.18
< 1.21
20.96

< 0.48
0.60
0.48
1.20

MARINE DOCK #1

VINYL CHLORIDE SHIP DISCONNECT EXCURSIONS - PERSONNEL

TLV-5

<u>DATE</u>	<u>SHIP</u>	<u>TOP DECK ONLY NO RESPIRATORY PROTECTION</u>	<u>WORKED DISCONNECT USED BREATHING AIR</u>
3/25	PRINS MAURITS	0.29	1.67 2.57
5/15	CORAL ISIS	0.57	2.5 40.04
6/10	CORAL ISIS	0.45	54.99 261.85
6/23	CORAL ISIS	0.29	79.8 18.6
7/18	MERWE GAS	0.34	1.67 0.49
9/15	EPSILON GAS	0.01	1.28 359.3
10/8	EPSILON GAS	21.23	251.9 82.24

ABOVE TLV

1 OF 7

8 OF 14

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MARINE DOCK #2

VINYL CHLORIDE SHIP DISCONNECT EXCURSIONS - PERSONNEL

TLV-5

<u>DATE</u>	<u>SHIP</u>	<u>TOP DECK ONLY NO RESPIRATORY PROTECTION</u>	<u>WORKED DISCONNECT USED BREATHING AIR</u>
1/5	PRINS MAURITS	0.9	42.0 17.5
1/18	PRINS MAURITS	0.31	0.98 4.41
1/27	CONCORDIA FJORD	0.41	6.97
1/31	PRINS MAURITS	1.94	33.1 58.3
2/28	PRINS MAURITS	0.03	1.77 0.48
3/12	PRINS MAURITS	0.11 0.0	12.3
3/21	HENRIETTE THOLSTRUP	2.82	44.5 35.5
5/26	CORAL ISIS	4.1	118.1 90.17
6/2	SUSAN MAERSK	38.58	25.39 30.3
6/25	GALCONDA	0.7	26.2 31.9
7/18	LORD KELVIN	0.26	1.12 0.48
7/26	DELTAGAS	1.46	53.12 177.88
8/22	MERWE GAS	0.1	3.68 1.99
9/17	GARLA		750.0 9.56
9/25	HENRIETTE THOLSTRUP	0.18	27.2 470.0

DOCK #1
BARGE SAMPLES-1984

	TWA	EXCURSIONS
METHYLENE CHLORIDE	III	I
CHLOROFORM	IIII	II
PERCHLOROETHYLENE		
ETHYLENE DICHLORIDE	IIII II	IIII
CARBON TETRACHLORIDE	IIII	
VINYL CHLORIDE		
METHANOL	III	

MARINE DOCK #2 (cont'd)

VINYL CHLORIDE SHIP DISCONNECT EXCURSIONS - PERSONNEL

TLV-5

<u>DATE</u>	<u>SHIP</u>	<u>TOP DECK ONLY NO RESPIRATORY PROTECTION</u>	<u>WORKED DISCONNECT USED BREATHING AIR</u>
9/26	EPSILONGAS	0.14	1.99 2.38
10/13	HENRIETTE THOLSTRUP	0.18	3.77 15.46
10/19	EPSILONGAS	0.11	7.58 17.5
11/24	GALCONDA	11.7	241.0 200.7
11/15	EPSILONGAS	0.28	56.6 65.27
12/23	EPSILONGAS		289.0 95.9

ABOVE TLV

2 OF 20

29 OF 40

9/26

EPSILONGAS

ALSO MONITORED EMPLOYEE INHIBITING HYDROQUINONE INTO POT; INHIBITING
OF ALL FOUR VINYL SHIP TANKS WAS MONITORED - TOTAL TIME 43 MINUTES -
RESULT 116 PPM.

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