

**LOUISIANA DIVISION INDUSTRIAL HYGIENE REPORT
THE DOW CHEMICAL COMPANY**

LAD-95-1982-2
File Number

12/29/95
Date

Title: Results of Monitoring Conducted at the Chlorine Facility for Hexes and Sodium Hydroxide During 1982.

SUMMARY:

During 1982 monitoring was performed for Hexes and Sodium Hydroxide at the Chlorine Facility. Monitoring conducted for asbestos is reported under separate reports.

Results are presented in the attached tables.

Coversheet prepared by:

J. Paul

DISTRIBUTION:

None

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D W CHEMICAL U.S.A.
LOUISIANA DIVISION

ENVIRONMENTAL CONTROL

REPORT OF ANALYSIS

REFERENCE NO. AN180

DATE THIS REPORT 7/27/82

CHARGE _____

DEPT CHLORINE

DATE SAMPLES COLLECTED ?

SAMPLES POTENTIAL PERSONNEL EXPOSURE TO CAUSTIC

ID	CONCENTRATION: TOTAL MILLIGRAMS (Na)					REMARKS
01276		.033				
01278		.075				
01279		BLD				
01281		.086				
02030		.074				
02034		.060				
02035		.098				
03022		.004				
03023		.009				
03025		.220				

METHOD AA-Na DESORBED IN
20mls acidified H₂O

MLS SOLVENT 20mls
LIMIT OF DETERMINATION .02 µg/ml
(WEIGHT/VOLUME) _____

*BLD - BELOW LIMIT OF DETERMINATION

VALUES REPORTED HAVE BEEN CORRECTED FOR INTERFERENCES

REMARKS _____

BY LS

SIGNED Terry Wilber

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DOW CHEMICAL U.S.A.
LOUISIANA DIVISION

ENVIRONMENTAL CONTROL

REPORT OF ANALYSIS

REFERENCE NO. AN210

DATE THIS REPORT 11-12-82

CHARGE _____

DEPT. CL2

DATE SAMPLES COLLECTED 11/4/82

SAMPLES Potential Personnel Exposure to Na

ID	Concentration: Total Milligrams	REMARKS
Blank		
01265	BLD	
03027	.047	
03628	^{NO} sample	
03643	BLD	
03644	.007	
03645	BLD	
03646	.015	
03647	BLD	
03648	.007	
03035	BLD	

METHOD AA

MLS SOLVENT 20ml Acidified H₂O

LIMIT OF DETERMINATION .05 mg/l

*BLD - BELOW LIMIT OF DETERMINATION

(WEIGHT/VOLUME) _____

VALUES REPORTED HAVE BEEN CORRECTED FOR INTERFERENCES

REMARKS Results from BLANK were subtracted out.

BY James W. Smith

SIGNED Terry Wilke

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AN 210

CL₂

11-12-82

Done with
Blank Subtracted

BLANK .385 mg/L = .00385 mg/ml X 10 ml X 20 ml = .077 mg

01265 .37 mg/L = .00037 mg/ml X 10 ml X 20 ml = .074 mg

03027 .62 mg/L = .00062 mg/ml X 10 ml X 20 ml = .124 mg

03628 NIOSA

03643 .37 mg/L = .00037 mg/ml X 10 ml X 20 ml = .074 mg

03644 .42 mg/L = .00042 mg/ml X 10 ml X 20 ml = .084 mg

03645 .35 mg/L = .00035 mg/ml X 10 ml X 20 ml = .070 mg

03646 .46 mg/L = .00046 mg/ml X 10 ml X 20 ml = .092 mg

03647 .39 mg/L = .00039 mg/ml X 10 ml X 20 ml = .078 mg

03648 .42 mg/L = .00042 mg/ml X 10 ml X 20 ml = .084 mg

03035 .24 mg/L = .00024 mg/ml X 10 ml X 20 ml = .048 mg

Df 03648 .423 mg/L = .000423 mg/ml X 10 ml X 20 ml = .0846 mg

Ø

.047 mg

Ø

.007 mg

Ø

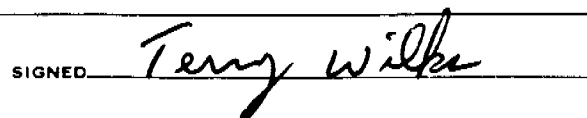
.615 mg

.001 mg

.007 mg

Ø

.0076 mg



[illegible]

CHLORINE BLOCK

ATTACHMENT

<u>DATE</u>	<u>SAMPLE #</u>	<u>SAMPLE DESCRIPTION</u>	<u>DURATION (MIN.)</u>	<u>VOLUME (1.)</u>	<u>FIBERS/CC >5 MICRONS IN LENGTH</u>
9/15/82	3036	Personnel - SOT - Pulping Cells and Routine Sampling	120	334.00	0.01
9/16/82	3033	Personnel - SOT - Pulping Cells	60	129.00	<0.01
9/16/82	3034	Personnel - SOT - Pulping Cells	60	114.00	0.21
10/1/82	3641	Personnel - SOT - Pulping Cells - Routine cell area rounds	100	205.00	0.18
10/5/82	3032	Personnel - SOT - Routine rounds in cell area	120	237.00	<0.01
10/13/82	3629	Personnel - SOT - Pulping Cells	105	210.00	0.06
10/14/82	3030	Personnel - SOT - Pulping Cells	45	83.25	0.06
10/14/82	3706	Personnel - SOT - Pulping Cells	45	92.25	0.05
10/28/82	3658	Personnel - SOT - Pulping Cells	120	252.00	0.19
10/28/82	3710	Personnel - Pulping Cells	120	234.00	0.10

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CELL SERVICE BLOCK
(Continued)

ATTACHMENT

<u>DATE</u>	<u>SAMPLE #</u>	<u>SAMPLE DESCRIPTION</u>	<u>DURATION (MIN.)</u>	<u>VOLUME (1.)</u>	<u>FIBERS/CC >5 MICRONS IN LENGTH</u>
10/4/82	1369	Area - D513	220	374.00	0.10
11/2/82	1370	Area - Debugging Room - Control Panel	250	425.00	0.59
11/15/82	1381	Area - Debugging Room - Control Panel			
11/15/82	1382	Area - Cathode oven Control Panel	250	425.00	1.19
11/17/82	1356	Area - Debugging Room - Control Panel	380	646.00	0.26
11/17/82	1355	Personnel - SOT Cathode drawing vat	380	646.00	0.14
11/17/82	1356	Area - Debugging Room - Control Panel	250	425.00	0.33
11/19/82	1385	Area - Post in center of building	375	637.50	0.12
12/2/82	1354	Area - Lab	305	518.50	0.23
12/10/82	3976	Area - Turbine in oven area	360	612.00	0.06
12/10/82	3977	Area - Debugging Room Control Panel	360	612.00	0.01
12/10/82	3978	Area - Lab	360	612.00	0.06

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CELL SERVICE BLOCK

ATTACHMENT

<u>DATE</u>	<u>SAMPLE #</u>	<u>SAMPLE DESCRIPTION</u>	<u>DURATION (MIN.)</u>	<u>VOLUME (1.)</u>	<u>FIBERS/CC >5 MICRONS IN LENGTH</u>
12/15/82	3840	Area - Ramsey Scarlett Warshouse - Center of Asbestos Storage Area	300	510.00	0.08
12/15/82	3889	Area - Ramsey Scarlett Warehouse - south side of asbestos storage area	300	510.00	0.12
12/16/82	2503	Personnel - SOT - Cathode Drawing vat control board	280	476.00	0.15
12/21/82	2504	Personnel - Laborer Ramsey Scarlett Warehouse - Riding tow motor - stacking pallets of asbestos in storage area	150	255.00	0.80
12/21/82	2505	Area - Ramsey Scarlett Warehouse South side of asbestos storage	150	255.00	*OVERLOADED

*Overloaded with fibers prohibiting analysis.

CHLOR ALKALI II BLOCK

ATTACHMENT

<u>DATE</u>	<u>SAMPLE #</u>	<u>SAMPLE DESCRIPTION</u>	<u>DURATION (MIN.)</u>	<u>VOLUME (1.)</u>	<u>FIBERS/CC >5 MICRONS IN LENGTH</u>
7/8/82	2981	Personnel - OTT Pulping cells after start-up	210	336.00	0.23
8/4/82	2970	Personnel - OTT Pulping Cells	30	60.00	0.20
9/30/82	2964	Personnel - OTT Pulping cells	89	178.00	0.16
10/4/82	2963	Personnel - OTT Pulping cells	165	303.60	0.08
10/5/82	2957	Personnel - OTT Pulping cells - filling pulp wagon	56	112.00	0.20
10/6/82	2956	Personnel - OTT Pulping cells - filling pulp wagon	108	216.00	0.70
10/11/82	2953	Personnel - OTT Pulping cells	74	268.00	0.05

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