PLAINTIFF'S
EXHIBIT
DUP-1861

counteract the effect of the phosphoric ac[illegible] polymerization inhibitor. Demineralized wa[illegible] turn, has a pH that ranges between 5.0 and 7.0. This is a recommendation of the 1982 Acids Powerhouse Process Hazards Survey. Completion is expected by year end.

F. Industrial Hygiene (Warren)

A summary of the chemical monitoring conducted during the 3rd quarter is given in Table I. A total of 36 samplings for 8 different chemicals were taken. No overexposures were encountered.

The statistical summaries of the annual personal NO_2 monitoring in Ops 2-4 & Ops 15-16, Waste areas are given in Tables II & III. In both studies the statistical goal of ensuring that 95% of the values will be less than the TLV (3 ppm) was achieved.

The results of 20 asbestos samplings of insulation removal jobs are given in Table IV. All samples except one were taken at the roped off periphery (16 downwind & 3 upwind). The asbestos loadings on all samples were well below the new TLV of 0.5 fibers/cc. Therefore it was concluded that the present method of setting the location of the roped off area is adequate. Rule of thumb experience shows that 10-20 ft clearance on the downwind side is adequate for small jobs (0-1 hr) & 50-100 ft is adequate for larger jobs (> 1 hr).

DUP 0814276

DV1 [illegible]

DUP 0814277

DU 009753

TABLE I

CHEMICAL MONITORING DURING 3RD QTR, 1983

Area	Date	Type Sampling	Long or Short Term	Task	No. of Samplings	Chemicals Analyzed	No. of Over-Exposures
Ops 2-4	9/7/83	Personal (Production &) Mechanical	Long	Routine Shift Jobs	7	NO_2	0
Op 11-15, Waste	9/6-9/7	Personal (Production &) Mechanical	Long	" "	8	NO_2	0
All Areas	1/27/83-1/27/83	Task/Area	7 Short(<4hr) 13 Long(<4hr)	Removal of Asbestos Insulation	19	Asbestos Loading	0
Op 11-14	9/22/83	Task	Short	Pulling POD Plugs	2	6 DDDA H/C	0
				Total	36	8 Different Chemicals	0

DUP 0814278

DU 009754

TABLE II

STATISTICAL SUMMARY OF OPS. 2-4 PERSONAL NO_2 MONITORING

IN SEPTEMBER, 1983

NO_2 TLV - 3 PPM

JOB	NO. OF SAMPLES	NO. OF ZERO/TRACE	RANGE PPM	G.M. PPM	G.S.D. PPM	LOGAN A	LOGAN R	LOGAN T	95/95 E.V.	% of TLV (A Value)
Composite of Production and Mechanical Jobs	7	0	0.09-0.32	0.18	1.69	0.52	0.29	0.35	1.07	17.3

DUP 0814279

DU 009755

TABLE III

STATISTICAL SUMMARY OF NO_2 MONITORING IN OPS. 15-16, WASTE OPERATORS & MECHANICS IN SEPTEMBER, 1983

NO_2 AEL - 3 PPM

JOB	NO. OF SAMPLES	NO. OF ZERO/TRACE	RANGE PPM	G.M. PPM	G.S.D. PPM	LOGAN A	LOGAN R	LOGAN T	95/95 E.V.	% of AEL (A Value)
Composite of 5 Different Production and Mechanical Jobs (Table I)	8	0	0.00-0.32	0.19	1.55	0.44	0.29	0.34	0.77	14.7

DUP 0814280

DU 009756

TABLE IV

ASBESTOS INSULATION REMOVAL - PERIPHERY MONITORING

Date	Sample* Ident.	Oper. Area	Removal Job	Location of Samples	Periphery Location	Wind Dir.	Wind V-MPH	Sampling Hrs.	Sampling Liters	Asbestos Ldg. Fibers >5u/cc
1/25/83	1	2	Stm Valve & Line #1 Conc. Still	8' E of Valve 5' high	DW	Inside Bldg.		0.07	6.4	0.26
1/31/83	2	5	Process Line-AOPI Absorber	25' NE of Line 4' High	DW	SSW	5-10	0.58	52.5	0.10
3/7/83	A	11	Stm. Line-Cent. Org. HUT	20' S of HUT 5' High	DW	N/NNW	10-12	0.33	28.5	.<1050
5/28/83	5H	1	Sec. Stripper Column	25' N of Column 4' High	DW	(NOT NOTED)		4.0	471	.0006
6/4/83	5D	1	Wet Stripper & Topper	150' N of Column 4' High	DW	S	10-15	3.0	270	.011
6/4/83	5I	1	Wet Stripper & Topper	225' N of Column 3rd Floor High	DW	S	10-15	3.0	270	.<011
6/4/83	5L	Nylon	Benzene	60' N of Column 3rd Floor High	DW	S	10-15	3.1	278	.<011
6/5/83	4Z	1	PDHCS Column	75' N of Column 4' High	DW	SE	15	4	360	.<008
6/5/83	5A	1	" "	105' W of Column 4' High	DW	SE	15	4	360	.<008
6/10/83	1	1	4 Columns	150' S of Columns 6' High	DW	SE	10	8.5	765	.<0039
6/10/83	2	1	" "	75' N of Columns 3' High	DW	SE	10	8.47	762	.0105

Date	Sample* Ident.	Oper. Area	Removal Job	Location of Samples	Periphery Location	Wind Dir.	Wind V-MPH	Sampling Hrs.	Sampling Liters	Asbestos Ldg. Fibers >5u/cc
6/10/83	3	1	" "	30' W of Columns 3' High	DW	SE	10	8.57	771	.<0039
6/11/83	4	1	" "	150' S of Columns 6' High	UW	SE	10-12	8.47	761	.<0105
6/11/83	5	1	" "	75' N of Columns 3' High	DW	SE	10-12	8.33	750	.<0053
6/11/83	6	1	" "	55' W of Columns 3' High	DW	SE	10-12	8.47	761	.<0039
6/18/83	16	1	PMD-1 Column	150' N of Column 20' High	DW	SE	5	7.75	837	.0657
6/18/83	17	1	" "	150' E of Column 20' High	UW	SE	5	7.75	884	.0125
6/18/83	18	1	" "	150' N of Column 10' High	DW	SE	5	7.75	930	.<0032
6/27/83	17	16(TF)	DBW Ext Tk	37' E of Tk 4' High	DW	W	2	2.95	326	.<0092
				Inside Periphery Monitoring						
5/28/83	5E	1	Sec. Stripper	20' S of** Stripper 4' High	DW	(NOT NOTED)		4.0	499	.0261

* - First 3 Samples Analyzed by Haskell Lab, the Balance by Clayton Environmental Consultants, Inc.

** - Roped Off Area About 75' S of Stripper

*** - Downwind (DW) or Upwind (UW)