



DOW CHEMICAL U.S.A.

February 21, 1982

LOUISIANA DIVISION
P. O. BOX 160
PLAQUEMINE, LOUISIANA 70764
504 389-8000T. P. Rozas
A. S. Bakerxc: C. Halphen
D. Kennedy

ENVIRONMENTAL ACCOMPLISHMENTS FOR 1981 AND OBJECTIVES FOR 1982 - VINYL I

Accomplishments in 1981 to reduce personnel exposures were:

1. Installed atomated sampler at C-13 to reduce possible exposure to Tetras.
2. The Quench area was upgraded from 55 psig to 70 psig to help prevent safety valve discharges.
3. Installed a restricting orifice in HCl line to C-10B to prevent the overloading of this column.
4. Minimized all EDC reactor vents to scrubber by efficient operation of THROX units.
5. Ran additional piping off btms. of C-20's to an area of higher water flow, which quenches the water flow and prevents vapor release.

Primary objective for 1982 is continued reduction of exposure to Vinyl and EDC. To do this we must:

1. Continue personnel and area sampling to track problems.
2. Replace refrigerated vent condensers on check tanks.
3. Minimize all EDC reactor vents to scrubber by efficient operation of THROX units.
4. Increase Safety Valve settings on D-7A & B to 150# to help prevent release of safety valves.

Accomplishments in 1981 to reduce noise levels were:

1. Installed whisper trim valve for D-7A suction pressure control valve.
2. Insulation around steam control valves in plant.
3. Did away with steam vacuum jet at Sump 1 and installed a water jet.

Secondary objectives for 1982 is to continue to reduce noise levels, and do a better job of educating our people of effects of noise and prevention of over exposure to noise.

Marvin M. Cox
Vinyl I PlantDO 084791
CONFIDENTIAL

MMC:dmt

AN OPERATING UNIT OF THE DOW CHEMICAL COMPANY

FILLED IN BY M. M. CoxPLANT Vinyl IBLOCK 17STRESS Vinyl

MINIMAL DETECTABLE

LIMIT AND UNIT

.2 PPB

NO.	JOB CLASS	AREA/ TASK	PERSONNEL					AREA				EXCURSION			
			*PT. EQ.	TWA BASIS	NO. SAMPLES	AVG.	HIGH	SAMPLE DURATION	NO. SAMPLES	AVG.	HIGH	EXCUR. DURATION	NO. SAMPLES	AVG.	HIGH
01	OTT														
02	OT	1/5	3	8 hr.	17	.32	1.63					15'	17	.45	3.5
03	SOT	2/	3	8 hr.	12	.69	1.74					15'	12	.13	.64
04	OS	4/	3	8 hr.	11	.34	.87					15'	11	.72	4.48
05	SS	6/	3	8 hr.	6	.39	1.35					15'	6	.04	.21
06	EDO	1/7	3	8 hr.	9	.37	1.15					15'	10	.33	2.05
07	LAB	9/6	3	8 hr.	6	.34	.60					15'	6	.95	4.1
08	TECH	6/	3	8 hr.	9	.33	.64					15'	9	.20	.67
09	CLER.	6/	3	8 hr.	1	.56	.56					15'	1	.28	.28
10	INSTR	1/14	3	8 hr.	6	.35	.79					15'	6	.17	.56
11	LABORER	1/		8 hr.	3	.45	.93					15'	4	.51	1.77
12	SUMMER														
13	CONT MAINT	5/7		8 hr.	20	.10	.45					15'	23	.56	4.77
14	NON-OS SPEC.														
15	SECUR.														
16	MATL CONT														
17	LOADING														
18	T/C CLNG														
19	MGRS/NON- OP														
20	AREA SAMP (NO JC)	1/						8 hr.	168	.466	41.02				

DO 084792
CONFIDENTIAL

* PROTECTIVE EQUIPMENT: (1) Mouthbit (2) Full Face (3) Half or Dust Face (4) Air Supply (5) Hearing Protection

EMPLOYEE EXPOSURE SUMMARY

ANNUAL YEAR 1901

FILLED IN BY M. M. CoxPLANT Vinyl IBLOCK 17 STRESS EDCMINIMAL DETECTABLE
LIMIT AND UNIT .2 PPB

NO.	JOB CLASS	AREA/ TASK	PERSONNEL					AREA				EXCURSION			
			*PT. EQ.	TWA BASIS	NO. SAMPLES	AVG.	HIGH	SAMPLE DURATION	NO. SAMPLES	AVG.	HIGH	EXCUR. DURATION	NO. SAMPLES	AVG.	HIGH
01	OTT														
02	OT	1/5	3	8 hr.	17	2.64	12.17					15'	17	17.76	145.12
03	SOT	2/	3	8 hr.	12	2.11	12.99					15'	12	.09	1.08
04	OS	4/	3	8 hr.	11	1.21	4.33					15'	11	.78	5.41
05	SS	6/	3	8 hr.	6	.54	2.77					15'	6	10.05	59.32
06	EDO	1/7	3	8 hr.	9	.35	1.25					15'	10	5.05	20.7
07	LAB	9/6	3	8 hr.	6	.21	.70					15'	6	.0002	.0002
08	TECH	6/	3	8 hr.	9	.07	.30					15'	9	1.25	11.27
09	CLER.	6/	3	8 hr.	1	.59	.59					15'	1	.02	.02
10	INSTR	1/14	3	8 hr.	5	.03	.32					15'	5	.56	2.79
11	LABORER	1/		8 hr.								15'	1	4.60	4.60
12	SUMMER														
13	CONT MAINT	5/7													
14	NON-OS SPEC.														
15	SECUR.														
16	MATL CONT														
17	LOADING														
18	T/C CLNG														
19	MGRS/NON- OP														
20	AREA SAMP (NO JC)	1/						8 hr	168	1.97	32.10				

DO 084793
CONFIDENTIAL

* PROTECTIVE EQUIPMENT: (1) Mouthbit (2) Full Face (3) Half or Dust Face (4) Air Supply (5) Hearing Protection

EMPLOYEE EXPOSURE SUMMARY

ANNUAL YEAR 1981

FILLED IN BY M. M. CoxPLANT Vinyl IBLOCK 17 STRESS Beta-triMINIMAL DETECTABLE
LIMIT AND UNIT .2 PPB

NO.	JOB CLASS	AREA/ TASK	PERSONNEL					AREA				EXCURSION			
			*PT. EQ.	TWA BASIS	NO. SAMPLES	AVG.	HIGH	SAMPLE DURATION	NO. SAMPLES	AVG.	HIGH	EXCUR. DURATION	NO. SAMPLES	AVG.	HIGH
01	OTT														
02	OT	1/5	3	8 hr.	17	.06	.25					15'	17	.61	3.44
03	SOT	2/	3	8 hr.	12	.06	.29					15'	12	.0002	.0002
04	OS	4/	3	8 hr.	11	.042	.24					15'	11	.097	1.07
05	SS	6/	3	8 hr.	6	.118	.68					15'	6	2.78	16.65
06	EDO	1/7	3	8 hr.	9	.36	2.75					15'	10	.178	1.23
07	LAB	9/6	3	8 hr.	6	.007	.04					15'	6	.0002	.0002
08	TECH	6/	3	8 hr.	9	.0002	.0002					15'	9	.0002	.0002
09	CLER.	6/	3	8 hr.	1	.04	.04					15'	1	.0002	.0002
10	INSTR	1/14	3	8 hr.	5	.02	.06					15'	5	.0002	.0002
11	LABORER	1/		8 hr.								15'	1	2.24	2.24
12	SUMMER														
13	CONT MAINT	5/7													
14	NON-OS SPEC.														
15	SECUR.														
16	MATL CONT														
17	LOADING														
18	T/C CLNG														
19	MGRS/NON- OP														
20	AREA SAMP (NO JC)	1/						8 h	168	.095	4.10				

DO 084794
CONFIDENTIAL

* PROTECTIVE EQUIPMENT: (1) Mouthbit (2) Full Face (3) Half or Dust Face (4) Air Supply (5) Hearing Protection

FILLED IN BY W. M. Cox

PLANT Vinyl I

BLOCK 17

STRESS 1112 Tons

MINIMAL DETECTABLE
LIMIT AND UNIT

.2 PPB

✓ REV
8(E)

0001-3412

TLV = 100 ppb

			PERSONNEL					AREA				EXCURSION			
NO.	JOB CLASS	AREA/ TASK	*PT. EQ.	TWA BASIS	NO. SAMPLES	AVG.	HIGH	SAMPLE DURATION	NO. SAMPLES	AVG.	HIGH	EXCUR. DURATION	NO. SAMPLES	AVG.	HIGH
01	OTT														
02	OT	/	3	8TW	4	1.0002	1.0002	X				X 15'	4	1.0002	1.0002
03	SOT	2/	3	8 Hr	5	.03	.1	X				X 15'	5	.0002	.0002
04	OS	4/	3	8 Hr	5	1.0002	1.0002	X				X 15'	5	.0002	.0002
05	SS	6/	3	8 Hr	4	1.0002	1.0002	X				X 15'	4	.0002	.0002
06	EDO	1/	3	8 Hr	2	.0002	.0002	X				X 15'	3	.0002	.0002
	Chemist	28													
	TECH	26													
09	CLER.	6/	3	8 Hr	1	.03	.03	X				X 15'	1	.0002	.0002
10	INSTR														
11	LABORER														
12	SUMMER														
13	CONT MAINT														
14	NON-OS SPEC.														
15	SECUR.														
16	MATL CONT														
17	LOADING														
18	T/C CLNG														
19	MGRS/NON- OP														
20	AREA SAMP (NO JC)	1/						8 hr	50	.02	.67				

DO 084795
CONFIDENTIAL

DO 084795
CONFIDENTIAL

* PROTECTIVE EQUIPMENT: (1) Mouthbit (2) Full Face (3) Half or Dust Face (4) Air Supply (5) Hearing Protection

FILLED IN BY M. M. Cox

PLANT Vinyl I BLOCK 17 STRESS 1,1,1,2 Tetras MINIMAL DETECTABLE LIMIT AND UNIT .2 PPB

NO.	JOB CLASS	AREA/TASK	PERSONNEL					AREA				EXCURSION			
			*PT. EQ.	TWA BASIS	NO. SAMPLES	AVG.	HIGH	SAMPLE DURATION	NO. SAMPLES	AVG.	HIGH	EXCUR. DURATION	NO. SAMPLES	AVG.	HIGH
01	OTT														
02	OT	1/5	3	8 hr.	17	.0002	.0002					15'	17	.0002	.0002
03	SOT	2/	3	8 hr.	12	.014	.1					15'	12	.0002	.0002
04	OS	4/	3	8 hr.	11	.0002	.0002					15'	11	.0002	.0002
05	SS	6/	3	8 hr.	6	.0002	.0002					15'	6	.0002	.0002
06	EDO	1/7	3	8 hr.	9	.0035	.03					15'	10	.0002	.0002
07	LAB	9/6	3	8 hr.	6	.0002	.0002					15'	6	.0002	.0002
08	TECH	6/	3	8 hr.	9	.0002	.0002					15'	9	.0002	.0002
09	CLER.	6/	3	8 hr.	1	.03	.03					15'	1	.0002	.0002
10	INSTR	1/14	3	8 hr.	5	.0002	.0002					15'	5	.0002	.0002
11	LABORER	1/		8 hr.								15'	1	.0002	.0002
12	SUMMER														
13	CONT MAINT	5/7													
14	NON-OS SPEC.														
15	SECUR.														
16	MATL CONT														
17	LOADING														
18	T/C CLNG														
19	MGRS/NON-OP														
20	AREA SAMP (NO JC)	1/						8 hr.	168	.0094	.37				

DO 084796
CONFIDENTIAL

* PROTECTIVE EQUIPMENT: (1) Mouthbit (2) Full Face (3) Half or Dust Face (4) Air Supply (5) Hearing Protection

FILLED IN BY M. M. Cox

EXCLUDED SAMPLES SUMMARY

QUANTITY 1122 TETRA

REV
(E) ✓

PLANT Vinyl I

BLOCK 17

STRESS 1122 Tetras

MINIMAL DETECTABLE
LIMIT AND UNIT

.2 PPB

0002-3632

TW. 0.1ppm(1)

NO.	JOB CLASS	AREA/ TASK	PERSONNEL					AREA				EXCURSION			
			*PT. EQ.	TWA BASIS	NO. SAMPLES	AVG.	HIGH	SAMPLE DURATION	NO. SAMPLES	AVG.	HIGH	* EXCUR. DURATION	NO. SAMPLES	AVG.	HIGH
01	OTT														
02	OT	1	3	8 hr	4	1.0002	1.0002	X				X 15'	4	1.0002	1.0002
03	SOT	2	3	8 hr	5	.02	.09	X				X 15'	5	.0002	.0002
04	OS	4	3	8 hr	5	1.0002	.0002	X				X 15'	5	.0002	.0002
05	SS	6	3	8 hr	4	.02	.07	X				X 15'	4	.17	.68
06	EDO	1	3	8 hr	2	.0002	.0002	X				X 15'	3	.0002	.0002
07	Chemist LAB	28													
08	TECH	26													
09	CLER.	6	3	8 hr	1		.0002	X				X 15'	1		.0002
10	INSTR														
11	LABORER														
12	SUMMER														
13	CONT MAINT														
14	NON-OS SPEC.														
15	SECUR.														
16	MATL CONT														
17	LOADING														
18	T/C CLNG														
19	MGRS/NON- OP														
20	AREA SAMP (NO JC)	1						8 hr	50	.006	.08				

DO 084797
CONFIDENTIAL

* PROTECTIVE EQUIPMENT: (1) Mouthbit (2) Full Face (3) Half or Dust Face (4) Air Supply (5) Hearing Protection

FILLED IN BY M. M. Cox

MINIMAL DETECTABLE

PLANT Vinyl I BLOCK 17 STRESS 1.1.2.2 Tetras LIMIT AND UNIT .2 PPB

NO.	JOB CLASS	AREA/ TASK	PERSONNEL					AREA				EXCURSION			
			*PT. EQ.	TWA BASIS	NO. SAMPLES	AVG.	HIGH	SAMPLE DURATION	NO. SAMPLES	AVG.	HIGH	EXCUR. DURATION	NO. SAMPLES	AVG.	HIGH
01	OTT														
02	OT	1/5	3	8 hr.	17	.002	.03					15'	17	.0002	.0002
03	SOT	2/	3	8 hr.	12	.009	.09					15'	12	.0002	.0002
04	OS	4/	3	8 hr.	11	.0002	.0002					15'	11	.0002	.0002
05	SS	6/	3	8 hr.	6	.012	.07					15'	6	.113	.68
06	EDO	1/7	3	8 hr.	9	.005	.04					15'	10	.0002	.0002
07	LAB	9/6	3	8 hr.	6	.0002	.0002					15'	6	.0002	.0002
08	TECH	6/	3	8 hr.	9	.0002	.0002					15'	9	.0002	.0002
09	CLER.	6/	3	8 hr.	1	.0002	.0002					15'	1	.0002	.0002
10	INSTR	1/14	3	8 hr.	5	.0002	.0002					15'	5	.0002	.0002
11	LABORER	1/		8 hr.								15'	1	.0002	.0002
12	SUMMER														
13	CONT MAINT	5/7													
14	NON-OS SPEC.														
15	SECUR.														
16	MATL CONT														
17	LOADING														
18	T/C CLNG														
19	MGRS/NON- OP														
20	AREA SAMP (NO JC)	1/						8 hr.	168	.0068	.73				

DO 084798
CONFIDENTIAL

* PROTECTIVE EQUIPMENT: (1) Mouthbit (2) Full Face (3) Half or Dust Face (4) Air Supply (5) Hearing Protection

PLANT Vinyl IBLOCK 17 STRESS Etc1MINIMAL DETECTABLE
LIMIT AND UNIT .2 PPB

NO.	JOB CLASS	AREA/ TASK	PERSONNEL					AREA				EXCURSION			
			*PT. EQ.	TWA BASIS	NO. SAMPLES	AVG.	HIGH	SAMPLE DURATION	NO. SAMPLES	AVG.	HIGH	EXCUR. DURATION	NO. SAMPLES	AVG.	HIGH
01	OTT														
02	OT	1/5	3	8 hr.	17	.04	.19					15'	17	.36	1.82
03	SOT	2/	3	8 hr.	12	.019	.08					15'	12	.0002	.0002
04	OS	4/	3	8 hr.	11	.015	.10					15'	11	.0002	.0002
05	SS	6/	3	8 hr.	6	.0013	.007					15'	6	.0002	.0002
06	EDO	1/7	3	8 hr.	9	.02	.08					15'	10	.063	.34
07	LAB	9/6	3	8 hr.	6	.0116	.04					15'	6	.1018	.97
08	TECH	6/	3	8 hr.	9	.0002	.0002					15'	9	.031	.27
09	CLER.	6/	3	8 hr.	1	.0002	.0002					15'	1	.0002	.0002
10	INSTR	1/14		8 hr.	5	.03	.102					15'	5	.0002	.0002
11	LABORER	1/		8 hr.								15'	1	.0002	.0002
12	SUMMER														
13	CONT MAINT	5/7													
14	NON-OS SPEC.														
15	SECUR.														
16	MATL CONT														
17	LOADING														
18	T/C CLNG														
19	MGRS/NON- OP														
20	AREA SAMP (NO JC)	1/						8 hr.	168	.045	2.12				

DO 084799
CONFIDENTIAL

* PROTECTIVE EQUIPMENT: (1) Mouthbit (2) Full Face (3) Half or Dust Face (4) Air Supply (5) Hearing Protection

EMPLOYEE EXPOSURE SUMMARY

ANNUAL YEAR 1961

FILLED IN BY M. M. Cox

PLANT Vinyl I BLOCK 17 STRESS MeCl₂ MINIMAL DETECTABLE LIMIT AND UNIT .2 PPB

NO.	JOB CLASS	AREA/TASK	PERSONNEL					AREA				EXCURSION			
			*PT. EQ.	TWA BASIS	NO. SAMPLES	AVG.	HIGH	SAMPLE DURATION	NO. SAMPLES	AVG.	HIGH	EXCUR. DURATION	NO. SAMPLES	AVG.	HIGH
01	OTT														
02	OT	1/5	3	8 hr.	17	.03	.52					15'	17	.02	.28
03	SOT	2/	3	8 hr.	12	.001	.005					15'	12	.0002	.0002
04	OS	4/	3	8 hr.	11	.0019	.007					15'	11	.0002	.0002
05	SS	6/	3	8 hr.	6	.165	.98					15'	6	.0002	.0002
06	EDO	1/7	3	8 hr.	9	.12	1.08					15'	10	.008	.08
07	LAB	9/6	3	8 hr.	6	.0002	.0002					15'	6	.0002	.0002
08	TECH	6/	3	8 hr.	9	.0002	.0002					15'	9	.0002	.0002
09	CLER.	6/	3	8 hr.	1	.07	.07					15'	1	.0002	.0002
10	INSTR	1/14	3	8 hr.	5	.0002	.0002					15'	5	.0002	.0002
11	LABORER	1/										15'	1	.0002	.0001
12	SUMMER														
13	CONT MAINT	5/7													
14	NON-OS SPEC.														
15	SECUR.														
16	MATL CONT														
17	LOADING														
18	T/C CLNG														
19	MGRS/NON-OP														
20	AREA SAMP (NO JC)	1/						8 hr.	168	.079	6.27				

DO 084800
CONFIDENTIAL

* PROTECTIVE EQUIPMENT: (1) Mouthbit (2) Full Face (3) Half or Dust Face (4) Air Supply (5) Hearing Protection