TF-5498

UNION CARBIDE CORPORATION
CHEMICALS AND PLASTICS
P O BOX 471, TEXAS CITY, TEXAS 77590

September 12, 1972

Mr. Jerry Scannell
Director of Office of Standards
Occupational Safety Health Act
Washington, D. C. 20210

Dear Mr. Scannell:

Subject: Interpretation of Asbestos Standards

This is a request for interpretation of the sections related to personal monitoring and medical surveillance of the asbestos standards published in the Federal Register, Wednesday, June 7, 1972.

For business reasons we wish to distinguish between points required by law and points desirable from the humanitarian point of view.

With reference to Section F(ii) on monitoring, we wish to know the official interpretation relative to who should be monitored after the initial determination. Is it required that subsequent periodic monitoring be performed even though the initial determination was less than five fibers per cc?

With reference to Section J(3), Medical Examinations, please interpret the phrase, "each of his employees engaged in occupations exposed to airborne concentration of asbestos fibers." Does this in fact mean any exposure or exposures over the set limits.

Your prompt attention will be greatly appreciated.

Very truly yours,

Donald E. Deese

Donald E. Deese
Senior Industrial Hygienist
Gulf Coast Area

DED/da

UCTC 11678

PLAINTIFF'S EXHIBIT
UC-5156

INDUSTRIAL HYGIENE DEPARTMENT
ASBESTOS DUST STUDY
PLANT: 510

Department OXIDE-II MAINTENANCE Bldg. BOU Date 9-28-73 Time 8:49 AM

Sampled By: L.G. McMULLEN Analyzed By: McMULLEN Method: 38C-29X4-R1a

General Conditions: THE SAMPLE WAS COLLECTED IN THE BREATH ZONE OF MIK CARMONA, B.+R. LABORER, AS HE PICKED UP KAYLO-10 INSULATION THAT H. BEEN TORN OFF THE BOU. THE AREA WAS ROPED OFF, BUT HAD NO WARNING SIGNS. THE INSULATION WAS NOT WETTED, BUT WAS PLACED INTO POLY BAGS. AN MSA CUSTOM COMFO RESPIRATOR WAS WORN.

FIBER COUNT (Fibers > 5μ in Length) SAMPLE #1

Slide 1				Slide 2			
1	131	11	036200	1	310	11	2102001
2	040	12	003111	2	200	12	3010105
3	031	13	227220	3	112	13	2031311
4	072	14	001 02	4	200	14	300310
5	000	15	212 13	5	110	15	121104
6	102	16	003 20	6	21 3	16	110112
7	110	17	143 00	7	100	17	311121
8	120	18	421 34	8	20 0	18	120221
	101	19	010 01	9	001	19	220000
10	002	20	103 002	10	104	20	100000
Total	122	Avg.	1.47	Total	100	Avg.	1.08

CALCULATIONS

SAMPLE VOLUME: 36 Min. @ 2 LPM = 72 LITERS

$$\frac{(\text{Avg.Fiber Count}-\text{Avg.Blank Count})(\text{Total Filter Area})}{(\text{Counting Area})(\text{Vol.Air-Liters})(1000)} = \text{Concentration, Fibers/cc} > 5\mu$$

1. $\frac{(1.47 - 0)(855)}{(0.00731)(72)(1000)} = 2.39$ Fibers/ cc > 5μ

2. $\frac{(1.08 - 0)(855)}{(0.00731)(72)(1000)} = 1.75$ Fibers / cc > 5μ

Special Conditions:

Remarks: THE JOB WAS STARTED WITHOUT RESPIRATORS, WARNING SIGNS, OR ROPING OFF, AND THE INSULATION WAS NOT WETTED. EDDIE GEORGE, CK WALTHALL, AND HENRY HOLLAND WERE INFORMED OF THE HAZARD. DURING THE SAMPLING PERIOD, RESPIRATORS WERE WORN, AND THE AREA WAS ROPED OFF. WARNING SIGNS WERE NOT USED AND INSULATION WAS NOT WETTED.

PLAINTIFF'S EXHIBIT

UC-5157

INDUSTRIAL HYGIENE DEPARTMENT

ASBESTOS DUST STUDY

OXIDE-II PLANT: 510

Department MAINTENANCE Bldg. BOU Date 9-28-73 Time 9:28 AM

Sampled By: L.G. McMULLEN Analyzed By: McMULLEN Method: 38C-29X4-R1a

General Conditions: THE SAMPLE WAS COLLECTED IN THE BREATH ZONE OF MIKE CARMONA, B.+R. LABORER, AS HE RAKED UP KAYLO-10 INSULATION THAT HAD BEEN TORN OFF THE BOU. THE AREA WAS ROPED OFF, BUT HAD NO WARNING SIGNS. THE INSULATION WAS NOT WETTED, BUT WAS PLACED INTO POLY BAGS. AN MSA CUSTOM COMFO RESPIRATOR WAS U

FIBER COUNT (Fibers > 5μ in Length) SAMPLE #2

	Slide 1					Slide 2				
1	20	1	11	0 1 0	1 0 1 0	1	0 3	1	11	2 0 1 0 0 0 0
2	0 0	0	12	0 0	1 0 0 1 1	2	1 0	1	12	2 0 0 2 1 0 1
3	0 0	0	13	0 0	0 0 2 0	3	0 0	0	13	1 0 1 1 0 1 1
4	0 1	0	14	4 1	0 0 1 0 1	4	0 0	0	14	0 0 1 1 1 0 0
5	4 0	1	15	1 2	0 0 1 0 1	5	1 1	1	15	0 0 0 0 0 1 0
6	0 0	0	16	0 0	0 3 0 1 1	6	0 1	0	16	1 2 2 2 0 0 1
7	1 1	1	17	1 2	1 0 0 1 2	7	0 1	1	17	5 1 5 1 1 0 2
8	0 2	0	18	1 2	0 0 3 0 2	8	0 0	0	18	6 0 0 3 1 0 4
9	0 0	1	19	0 1	0 1 0 0 2	9	0 0	0	19	0 0 2 1 0 0 0
10	2 0	2	20	2 2	2 0 0 1 0	10	0 0	1	20	0 2 0 0 4 3 0
Total	70		Avg.	0.70		Total	80		Avg.	0.80

CALCULATIONS

SAMPLE VOLUME: 28.5 Min. @ 2 LPM = 57 LITERS

$$\frac{(\text{Avg. Fiber Count} - \text{Avg. Blank Count})(\text{Total Filter Area})}{(\text{Counting Area})(\text{Vol. Air-Liters})(1000)} = \text{Concentration, Fibers/cc} > 5\mu$$

1. $\frac{(0.70 - 0)(855)}{(0.00731)(57)(1000)} = 1.44$ Fibers/ cc > 5μ

2. $\frac{(0.80 - 0)(855)}{(0.00731)(57)(1000)} = 1.64$ Fibers / cc > 5μ

Special Conditions: _____

Remarks: THE JOB WAS STARTED WITHOUT RESPIRATORS, WARNING SIGNS, OR ROPING OFF, AND THE INSULATION WAS NOT WETTED. EDDIE EGGE, DICK UPTHEGROVE, AND HENRY HOLLAND WERE INFORMED OF THE HAZARD. DURING THE SAMPLING PERIOD, RESPIRATORS WERE WORN, AN AREA WAS ROPED OFF. WARNING SIGNS WERE NOT USED AND THE INSULATION WAS NOT WETTED.