OK for '76

UNION CARBIDE CORPORATION • MINING & METALS DIVISION • P.O. BOX 579 • NIAGARA FALLS, N. Y. 14302 • TEL: 716-278-3376

THE DISCOVERY COMPANY

December 28, 1972

PLAINTIFF'S EXHIBIT

UC-4122

Mr. Paul Saperstein
Concept Plastics
2012 Van Buren Street
High Point, NC 27260

Dear Mr. Saperstein:

Enclosed is a report of our dust sampling at your facility. I think you will find the report self-explanatory, however, should you have any questions, please do not hesitate to call me.

I have also included for your reference, a copy of the OSHA regulations concerned with asbestos dust.

Very truly yours,

E. J. Kleber
Customer Service Representative

EJK:cjb
Enclosures

CC: Mr. J. E. Walsh

X410482

AIRBORNE DUST COUNTS

for

Concept Plastics
High Point, NC

December 26, 1972

Personnel Present: E. J. Kleber
Union Carbide Corporation

J. E. Walsh
Union Carbide Corporation

UNION CARBIDE CORPORATION
Mining & Metals Division
Niagara Falls, New York

X410483

Description of Plant and Tests

The tests were conducted at Concept Plastics, High Point, North Carolina, on November 2, 1972. Concept Plastics casts polyester decorative moldings for the furniture industry.

RG-244 and other dry materials are added to a 55-gallon drum which is transported to a small Cowles and allowed to mix.

Samples were obtained from areas believed to be the most likely areas of airborne asbestos.

Apparatus and Procedure

Sampling and dust counting were carried out in accordance with OSHA Regulation 1910.93a, using the Bayer, Zummalde and Brown method for counting asbestos fibers by phase contrast microscopy (Bureau of Occupational Safety and Health, Feb. 1969).

Battery powered air pumps (M.S.A. type) calibrated to 2 liters per minute were used to collect personal breathing zone and environmental samples on Millipore membrane filters of 0.8 micron porosity.

Fiber counting was performed on a Leitz microscope utilizing phase contrast illumination at 400X and a Patterson Globe and Circle reticle.

Total dust was determined by light field microscopy at 100X.

Test Results

Two figures have been reported for each sample. They are:

1. Total Fiber - Any material 5 microns or longer having an aspect ratio of 3 or greater. Reported as fibers per milliliter.

2. Total Dust - Any fiber or particle present. Reported as million particles per cubic foot.

X410484

SUMMARY OF DUST COUNTS

N.B. No.	Description	Asbestos Count Fibers/ml. >5μ	Total Dust mppcf
1929-54-1	Environmental (18 min.) - 10 ft. from Cowles, before, during and after mixing cycle.	0.4	0.4
1929-54-2	Personal (11 min.) - Operator adding small amount (about 1 quart) of RG-244, pecan shell flour, and pigments to drum on Cowles. Monitored until materials wet out.	2.0	1.7

X410485

~~.006~~ 0.1

COUNT SHEET

Concept

Sample #	14	19	33	33
time	18.0		10.8	
flow				
1	0	55	0	153
2	0	58	0	133
3	0	54	0	156
4	0	51	0	151
5	1	60	0	141
6	0		0	
7	0		0	
8	1		1	
9	0		1	
10	0		2	
11	0		0	
12	0		0	
13	0		0	
14	0		0	
15	0		2	
16	0		0	
17	0		0	
18	0		0	
19	0		0	
20	0		0	
TOTAL	2	278	6	734
AVG	0.1	55.6	0.3	146.8
Field Area				
Filter Area				
Volume	↑	↑	↑	↑
CONCENTRATION	36.6	1.27	21.6	0.76
	0.40	0.4	1.98	1.7

Fiber cnt x Filter area
Field area x Sample vol. ml

X410486

#14 1:08
1:26
ENV. 10' from Coulo

Before, During & Just after
Mix

Concept

#33 Personal addict
OFA, RG-244 & "meal" (recon
shell flour), Pigment etc.

Monitor until Resin &
Wet out while mixing on Coulo

1:13:15
1:24:00

X410487

The results of microscope counts for air samples collected at Conwed Corporation, Cloquet, Minnesota, August 9th and 10th, 1972 are attached.

Apparatus & Procedure

Sampling and dust counting were carried out in accordance with OSHA Regulation 1910.93a.

Unico Personal Air Samplers, calibrated to 2 liters per minute, were used to collect personal breathing zone and environmental samples on Millipore membrane filters of 0.8 micron porosity.

Fiber counting was performed on a Leitz microscope utilizing phase contrast illumination at 400X and a Patterson Globe and Circle reticle.

Total dust was determined by light field microscopy at 100X.

Test Results

Three figures have been reported for each sample. They are:

1) Total Fiber - Any material 5 microns or longer having an aspect ratio of 3 or greater. Reported as fibers per milliliter.

2) Asbestos Fiber - Any material, 5 microns or longer, having an aspect ratio of 3 or greater, which in the judgement of the operator could possibly be asbestos. Reported as fibers per milliliter.

3) Total Dust - Any fiber or particle present. Reported as million particles per cubic foot.

Enclosed for reference is a copy of the OSHA Standard for exposure to asbestos dust, which includes silica and inert dust limits.

SUMMARY OF DUST COUNTS

I.B. No.	Description	Asbestos Fiber Count Fibers/ml > 5 μ	Total Fiber Count Fibers/ml > 5 μ	Total Dust mg/m³
	BOARD & PULP MILL			
929-2-1	Personal (7.67 min.) - Bulk fiber bagger - operator	0	0	0.16
929-2-2	Environmental (114 min.) - No. 3 board machine run-out section- 4' from end of conveyor dumping mineral wool into stock chest	0.15	1.01	0.55
929-2-3	Environmental (132 min.) - Mineral slurry hydropulper tub - eye level above tub 2 bags asbestos dumped every 20 minutes (HP Pellets)	0.19	1.40	1.02
929-2-4	Personal (2.08 min.) - Same as #3, during dumping	1.03	2.06	0.85
	COATING MAKE-UP AREA			
929-2-5	Environmental (145 min.) - Coating make-up deck between #35 mix tank and separan tank	0	0	2.85
929-2-6	Personal (9.33 min.) - Coating make-up deck on coating make-up man as batch of #31 coating is prepared	0	0	31.38
	FINISHING DEPARTMENT			
929-2-7	Environmental (43 min.) - No. 3 trimmer - operator's desk	0.20	0.40	1.09
929-2-8	Environmental (46 min.) - No. 4 trimmer - 9' off floor on catwalk by 2nd arbor	0.28	1.68	0.58
929-2-9	Environmental (115 min.) - Between #1 and #3 board dryers - by W. broke hydropulper 6' off floor	0.15	0.60	0.53
292-2-10	Environmental (194 min.) - No. 3 dry end coating line - slitter area - south side - 6' off floor	0.09	0.64	0.51
292-2-11	Environmental (138 min.) - No. 3 dry end coating line - station B. East grading station - 6' off floor	0.16	0.50	0.43
	TUFFLEX DEPARTMENT			
929-2-12	Environmental (75 min.) - No. 2 Tufflex line - shredder area eye level mount between cotton linter feeder and E. Shredder [10 min. blow-down with 3 air hoses during sampling]	0	0.17	1.20

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I.B. No.	Description	Asbestos Fiber Count Fibers/ml > 5.4	Total Fiber Count Fibers/ml > 5.4	Total Dust
929-2-13	Personal (9.75 min.) - No. 2 Tufflex machine - transfer section on backtender's helper	0.88	1.76	2.63
	CONWED FABRICS DEPARTMENT			
929-2-14	Personal (7.0 min.) - Conwed Farbics fiber preparation room - operator feeding cotton linters into P&S feeders	0	5.51	2.35
	LO-TONE DEPARTMENT			
929-2-15	Environmental (104 min.) - Lo-Tone #4 - line grinder area 6' off floor	0.16	1.44	0.76

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