FILE NAME: Kelly Moore (KM)

DATE: 0000

DOC#: KM023

DOCUMENT DESCRIPTION: KM Asbestos Memos

/cm

Asbestos Memos

TABLE I

SUMMARY OF AIRBORNE ASBESTOS FIBER COUNTS

CALIFORNIA VS. CANADIAN ASBESTOS

Sample No	Air Sample Time	Minutes	Operation Description	Airborne Asbestos Fiber Concentration (fibers/cc > 5μ) By Union Carbide	By LFE[1]	
FIRST TEST SEQUENCE						
Canadian Asbestos (7M05)						
B-08	8:26-8:36am	10	Personal sample. Operator mixing 4 bags of ceiling spray. Contained ~5% of Canadian grade 7M05 asbestos, limestone, Calif. talc, kaolin clay and polystyrene aggregate. Actual handling of asbestos took about 2 minutes. Remainder of time used in wetting and mixing.	3.2	0.6[2]	(11)
-	-	-	-	-	2.4[2]	(11) Downstream area sample during mixi
B-02	8:40-8:56am	16	Personal sample. Operator during spraying of Canadian containing blend. Sprayed for ~10 minutes.	1.6	0.5	(12)
B-07	8:40-9:00am	20	Personal sample. Helper wiping overspray off walls.	0.8	0.3	(12)
B-04	8:50-9:07am	17	Area sample. In opposite end of house during spraying of Canadian containing material, between operations, and the start of the Calidria containing material.	0.4	-	
California Asbestos (Calidria HPO)						
B-03	8:56-9:04am	8	Personal sample. Operator mixing 4 bags of ceiling spray. Contained ~4% of Calidria HPO. Other ingredients same as for sample B-08.	2.7		
B-	9:04-9:19am	11	Personal sample. Operator spraying texture containing HPO.	0.9	1.8	(25)
-	9:15-9:16am	-	Operator mixed two bags of HPO based material. This operation was not sampled by UCC.	-		
B-06	9:02-9:26am	24	Personal sample. Helper wiping overspray off walls.	0.5	0.2	(25)
SECOND TEST SEQUENCE						
Canadian Asbestos (7M05)						
A-69	2:21-2:35pm	14	Personal sample. Spray operator mixing 12 bags of ceiling spray containing ~2.5% Canadian grade 7M05 asbestos. More styrofoam than AM samples. Other ingredients the same. Actual dumping took ~10 minutes.	0.8	0.5	(10)
A-89	2:36-3:12pm	36	Personal sample. Spray operator adjusting sprayer and spraying second house with ceiling texture containing Canadian asbestos. About 27 minutes actual spraying.	1.0	0.7	(35)
A-100	2:25-3:16pm	51	Personal sample. Wiper during spraying of Canadian asbestos containing texture. (Second house.)	0.7	0.6	(22)
California Asbestos (Calidria HPO)						
A-67	1:30-1:53pm	23	Personal sample. Spray operator mixing four bags of ceiling spray containing ~2% HPO. (More styrofoam than AM samples.) Other ingredients same as B-08. Actual dumping took ~3 minutes.	1.5	1.1	(6)
A-19	1:53-2:30pm	27	Personal sample. Operator spraying one house (~18 minutes spraying.)	0.9	0.3	(22)
A-97	2:00-2:34pm	34	Personal sample. Wiper during spraying of HPO containing texture. (First house.)	0.8	0.6	(22)

(1) Samples taken on same operator with separate pumps. Actual sample times varied slightly with LFE times shown in parenthesis.

(2) Filter operated closed face by mistake.

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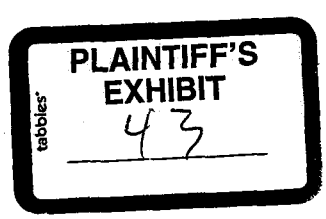


TABLE II

COMPARISON OF AIRBORNE FIBER SIZE DISTRIBUTION

	Airborne Asbestos Concentration - Fibers/cc				
	LFE Tests	UCC Tests			UCC
Magnification →	400X	400X	1000X	1000X	Sample
Operation — Fiber Size →	>5μ	>5μ	<5μ	>5μ	No.
Mixing Dry Spray Texture					
Canadian Test #1	2.4[1]	3.2	10.9	4.3	B-08
Canadian Test #2	0.5	0.8	1.6	1.0	A-69
California Test #1	1.8[2]	2.7	5.0	6.6	B-03
California Test #2	1.1	1.5	5.7	2.6	A-67
Spraying Texture Paint					
Canadian Test #1	0.5	1.6	7.4	3.3	B-02
Canadian Test #2	0.7	1.0	5.5	1.8	A-89
California Test #1	-	0.9	2.3	2.3	B-05
California Test #2	0.3	0.9	3.5	1.3	A-19

(1) Downwind of mixing operation.

(2) Includes both mixing and spraying.

TABLE II

SUMMARY OF FIBER SIZE MEASUREMENTS

Sample Identification	Measurements[1] Grids	Squares	Fiber Size Length (μ)	Diameter (μ)	Chrysotile by Diffraction	Notes
Spraying Texture Paint Containing ~5% Canadian Asbestos (UCC Sample B-02)	8	20	1	0.2	No	
			3	0.6	No	
			3	0.6	No	
			3.5	0.6	No	
			4	1	Yes	
			4.5	0.3	No	
			6	2.3	Yes	
			7	0.3	No	Tapered
			8	1	No	
			9	0.8	No	
			~10	0.2	No	Twisted
			10	1.3	No	
			25	0.2	No	
			Spike from particle		Yes	
			Cluster of fibers ~0.1 to 0.2μ diameter.		No	
Spraying of Texture Paint Containing ~4% California Asbestos (UCC Sample B-05)	7	20	1.8	0.4	Yes	
			2.3	0.3	No	
			2.3	0.4	No	
			4	0.6	No	
			~4	~0.6	No	Size estimated, no photograph.
			~4	~0.7	No	" "
			>10	0.5	No	Ran off grid square.
			20	1.0	No	
			25	0.6	Yes	
			2 Spikes from particle ~2μ	-	No	Tapered
			>3	0.3	No	Under platelet.

[1] Area per square ~0.008 mm^2.

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