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RESULTS OF AIR SAMPLES

PITTSBURGH CORNING
Tyler, Texas

Report Prepared By:
Jeremiah R. Lynch

March, 1968

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March 27, 1968

Mr. J. W. McMillan
Works Manager
Pittsburgh Corning Co.
Tyler, Texas 75701

Dear Mr. McMillan:

The analysis of the air samples collected in your plant during our survey in March 1967 has been completed, and the results are attached. The impinger samples were counted during the survey using the American Conference of Governmental Industrial Hygienists' method. The membrane filters were rendered transparent with a 50-50 mixture of diethyl oxalate, dimethyl phthalate and counted at 430X magnification with phase contrast illumination.

The dust concentrations as measured by impinger exceeded the 5 million particles per cubic foot Threshold Limit Value currently in use, in a number of locations. The membrane filter method is experimental and no standard has been set for its interpretation in this country. (The British Occupational Hygiene Society has issued "Hygiene Standards for Chrysotile Asbestos Dust" for the 5 μ + fiber counts in fibers/cc as follows: Negligible, Less than 0.5; Low, 0.5-2.0; Medium, 2.0-10.0; High, More than 10.0. They also recommend that "When it is necessary to work in a 'high dust' area an approved mask should be worn," The standards are for three-month averages.) Some relationships between the impinger and filter measurement, and some results of surveys of other asbestos product areas, are discussed in the enclosed reprints.

Your cooperation in this study is sincerely appreciated and the data gained from your plant is of considerable value.

Sincerely yours,

Jeremiah R. Lynch
Asst. Chief, Environmental
Activities
Field Studies
Occupational Health Program

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Enclosure

cc: Dr. Lee Grant
Dr. Crall
Prog. Mgmt. Officer.

Results of Air Samples of March 1967

Pittsburgh Corning, Tyler, Texas

Operation		Impinger		Membrane Filter		
		Sample #		Sample #	Fibers/cc Total 5 μ +	
Mixing Feeder Man	B	200	8.9	201	603.78	353.56
		212	51.4	213	491.44	255.77
		214	13.5	215	451.46	216.73
	P			7	613.39	336.61
				9		
				23		
				109	240.5	115.6
				114	260.23	200.57
	B	202	9.1	203	7.8	3.9
		210		211	13.4	8.2
		216	6.8	217	178.13	71.06
Scrap Grinder	P			8	75.5	43.3
				33	266.4	119.0
	G	117	4.9			
		102	2.2			
		105	7.8			
	B	204	4.7	205	92.9	53.4
		330	3.3	329	177.3	49.9
		323	2.9	327	61.6	21.8
		319	4.0	318	39.3	15.3
		317	1.2	316	11.9	7.2
		309	4.7	308	11.5	7.6
		26	1.4	27	78.6	20.3
		24	2.4	25	26.7	15.2
Forming Builder	B					

NOTES:

B - Breathing zone simultaneous impinger-membrane filter samples.

P - Personal membrane filter samples collected by a sampling pump worn by the worker.

G - General air samples.

Pittsburgh Corning

Operation		Impinger		Membrane Filter	
		Sample #	mpcf	Sample #	Total Sp. + Fibers/cc
Forming Builder	P			1	35.5
				2	54.7
				3	26.0
				5	10.1
				10	44.5
				11	30.6
				29	78.6
				30	26.4
				32	77.2
				36	41.2
				38	51.8
				39	31.7
				106	88.8
				107	87.8
				108	134.65
				111	87.1
				112	93.4
				113	267.51
					117.37
	G	120	4.7		
Curing Oven Man	B	332	0.1	331	.8
	P			37	6.0
Finishing Saw Operator	B	313	10.9	312	260.5
	P			19	
Nob Catcher	B	311	1.6	310	199.9
	P			13	121.0
Low Ventur	B	334	2.6	333	61.2
		336	2.0	335	33.4
		206	2.4	207	74.0
	P			18	84.0
					51.6

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Operation		Impinger		Membrane Filter		
		Sample #	mpcf	Sample #	Total	Filters/cc
Finishing						
Life Truck Driver	F			6	70.8	28.8
	G	123	1.9			
Packing						
Packer	B	203	2.5	209	101.7	27.9
		338	45.5	337		
	F			16		
Box Maker	F			14	10.7	4.7
Welder	F			22	40.2	26.1
				23	28.2	7.0
Sawyer	B	313	2.1	314	69.2	31.0
	F			17	24.3	13.2
Material Handler	F			21	27.4	10.0
Fork Lift Operator	F			110	11.2	9.0