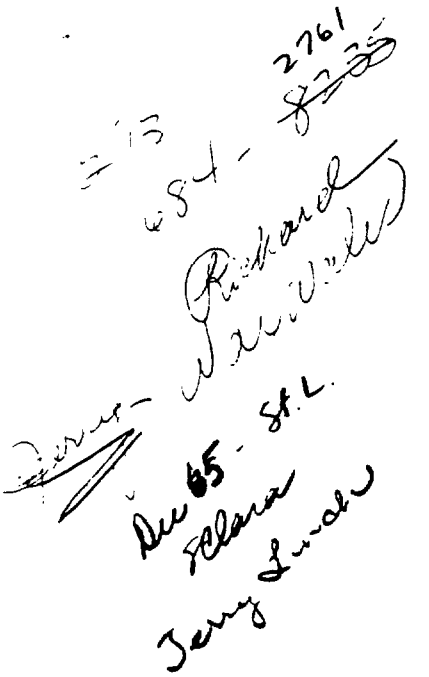
PLAINTIFF'S EXHIBIT

CT-505



CTD017606

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
PUBLIC HEALTH SERVICE

NATIONAL CENTER FOR
URBAN AND INDUSTRIAL HEALTH
1014 BROADWAY
CINCINNATI, OHIO 45202

REFER TO:

April 14, 1967

Mr. Daniel P. Maloney
Plant Manager
Certain-Teed Products Corp.
St. Louis, Missouri

Dear Mr. Maloney:

The analysis of the air samples collected in your plant during our survey in December 1965 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.

All of the dust concentrations as measured by impinger were under the 5 million particles per cubic foot Threshold Limit Value currently in use. The membrane filter method is experimental and no standards have been set for its interpretation. Some relationships between the impinger and filter measurement are discussed in the enclosed reprint.

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

Sincerely yours,

Jeremiah R. Lynch

Jeremiah R. Lynch
Engineering Section
Occupational Health Program

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Results of Air Samples of December 1965
Certain-Teed, St. Louis, Missouri

Operation	Impinger		Membrane Filter		
				Fibers/cc	
	Sample #	mppcf	Sample #	Total	10 μ+
Warehouse and Mixing					
Fiber Man--BZ	18	2.6			
Personal			106	5.3	2.1
			113	5.2	1.9
			121	120.3	37.8
Mixer Operator					
Personal			16	2.5	0.6
Grinder--BZ	112	3.7			
X-mas--Gen.	8	2.6			
	J9	1.4			
Pipe Forming					
Consol Operator					
Personal			110	1.2	0.2
			113	3.3	0.9
			122	2.3	0.7
Pipe Machine Tender					
Personal			15	3.0	1.2
			17	5.0	1.3
			116	2.7	0.9
Floor Man					
Personal			38	0.9	0.2
			39	0.9	0.3
X-mas--Gen.	20	1.5	22	11.6	2.3
	J21	0.2	N23	13.0	3.4
	200	0.3	203	5.7	1.1
	J201	0.2	N202	5.5	0.3

NOTES:
"Personal" refers to personal samples on membrane filters
"BZ" refers to breathing zone samples by companion impingers and membrane filter
"Gen." refers to samples of general air in the particular department

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Certain-Teed

Operation	Impinger		Membrane Filter		
				Fibers/cc	
	Sample #	mppcf	Sample #	Total	10 μ+
Curing					
Mandrel Puller--BZ	27	0.9	28	1.0	0.2
	24	0.4	25	4.5	1.1
Personal			14	3.5	0.9
			107	0.7	0.4
			114	5.8	1.5
			117	0.7	0.1
			123	0.6	0.3
Fork lift					
Personal			108	1.9	0.4
			138	0.4	0.1
Pipe Finishing					
Lathe Operator--BZ	41	0.7	42	1.0	1.0
	43	0.6	44	0.8	0.6
	135	0.4	136	0.4	0.0
Personal			35	1.1	0.4
			36	0.9	0.3
			37	0.7	0.2
			120	0.9	0.4
			141	0.9	0.3
			144	0.8	0.3
			149	1.1	0.7
			150	1.1	0.3
			151	0.4	0.1
Hydro-flex Tester--BZ	166	0.5			
	48	0.5	49	0.5	0.1
Personal			40	0.8	0.2
			137	1.0	0.3
			139	1.9	0.7
			152	1.4	0.7
			153	0.9	0.3

Certain-Teed

Operation	Impinger		Membrane Filter		
				Fibers/cc	
	Sample #	mppcf	Sample #	Total	10 μ+
Pipe Finishing (cont.)					
Pipe Handler					
Personal			142	1.4	0.3
X-mas--Gen.	204	0.1	206	0.2	0.0
	J205	0.1	N207	0.7	0.2
	147	0.8	146	1.1	0.5
	J148	0.6	N145	0.4	0.2
Beller					
Personal			45	1.5	0.5
			47	1.1	0.4
			140	1.1	0.5
Coupling Finishing					
Saw Operator--BZ	165	0.2	164	2.2	0.8
Personal			57	6.7	1.8
			64	4.2	1.5
			155	3.4	1.0
Lathe Operator					
Personal			67	3.9	1.8
			68	4.2	1.8
			69	3.1	1.1
			71	2.2	1.3
Boring Machine--BZ	169	0.5	168	2.3	0.8
	61	1.7	62	1.3	0.4
Personal			65	4.9	1.8
			72	4.4	2.0
			73	3.0	1.6
			143	1.9	0.7
Drill Press--BZ	170	0.7	171	1.3	0.7

Certain-Teed

Operation	Impinger		Membrane Filter		
				Fibers/cc	
	Sample #	mppcf	Sample #	Total	10 μ+
Coupling Finishing (cont.)					
FM Tester					
Personal			58	0.5	0.2
Checker					
Personal			66	11.7	4.0
X-mas--Gen.	208	0.7	210	0.7	0.0
	J209	0.4	N211	1.3	0.7
Epoxy					
Assembler					
Personal			70	1.3	0.4
Packing					
Stack Builder					
Personal			55	0.2	0.1
			60	2.4	1.0
Fork lift					
Personal			56	1.3	0.4
			59	0.4	0.1
			156	1.3	0.4
Miscellaneous					
Inspector					
Personal			46	1.3	0.4
			154	1.4	0.2
Mechanic					
Personal			109	6.9	1.7