RESULTS OF AIR SAMPLES

JOHNS-MANVILLE
Dennison, Texas

Report Prepared By:
Jeremiah R. Lynch

May, 1967

Plant 18 32,28

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

PUBLIC HEALTH SERVICE

Occupational Health Research & Training Facility
Bureau of State Services
1014 Broadway
Cincinnati 2, Ohio

May 8, 1967

Johns-Manville
Dennison, Texas

Attn: Mr. Gilbert C. Eggleston
Plant Manager

Dear Sir:

The analysis of the air samples collected in your plant during our Survey in January, 1966 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 standard has been set for its interpretation. 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 E. Lynch
Senior Sanitary Engineer
Engineering Section
Occupational Health Program

cc: Mr. Sheckler, JH
Region VII, Mr. Jones
State of Texas
Dr. Cralley
Asbestos File ✓

Results of Air Samples of January 1966

Johns-Manville, Dennison, Texas

Operation	Impinger		Membrane Filter		
	Sample #	mppcf	Sample #	Fibers/cc Total	Fibers/cc 10 μ+
Warehouse and Mixing					
Forklift					
Personal			144	17.7	7.5
Willow Operator					
Mixer					
Personal			229	8.0	2.8
BZ	107	0.5	108	1.4	0.5
Gen.	1	0.1	3	2.2	0.2
	J2	0.5	B4	3.5	0.5
Ball Mill					
Personal			270	3.1	0.9
			257	0.0	0.0
Gen.	37	1.1	39	91.7	9.7
	J38	1.5	B40	8.8	1.6
Hopper Car					
Unloader					
Personal			145	15.3	5.8
Pipe Forming					
Console Operator					
Personal			235	1.7	0.4
			232	0.8	0.1
BZ	110	0.6	111	4.1	0.8
Pipe Machine					
Tender					
Personal			239	1.0	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
"J" refers to respirable impinger sample
"B" refers to respirable membrane filter sample

Johns-Manville

Operation	Impinger		Membrane Filter		
	Sample #	f/cc	Sample #	Fibers/cc Total	Fibers/cc 10 μ+
Pipe Forming (cont.)					
Crane Operator					
Personal			209	2.3	0.5
Curing					
Mandrel Puller--Gen.	21	1.1	23	0.9	0.0
	J22	0.5	#24	2.4	0.5
	5	0.0	7	0.9	0.2
	J6	0.3	#8	4.0	0.5
Curer and Pipe Stacker					
Personal			207	1.5	0.3
			208	6.9	0.3
			236	1.2	0.3
	#4	0.7	114	2.5	0.2
Forklift					
Personal			221	13.7	3.0
			222	1.9	0.1
Pipe Finishing					
Lathe Operator					
Personal			136	2.2	0.2
			137	3.1	0.8
			151	2.0	0.2
			159	1.8	0.3
			162	1.6	0.4
			164	0.6	0.1
			165	0.6	0.2
#2	242	0.5	241	3.8	1.2
	244	0.4	243	2.1	1.2
	175	0.5	176	1.2	0.5
Gen.			35	1.7	1.4
			#36	2.3	0.8

Johns-Manville

Operation	Impinger		Membrane Filter		
	Sample#	mppcf	Sample #	Fibers/cc Total	Fibers/cc 10 μ+
Pipe Finishing (cont.)					
Hydro-Flex Tester					
Personal			138	1.1	0.2
			146	2.6	0.7
Gen.	29	1.2	31	6.8	1.8
	J30	0.3	J32	6.9	1.6
	33	0.6			
	J34	0.5			
Baller and Unit Loader					
Personal			156	2.4	0.3
			142	1.1	0.4
			271	4.0	0.4
			272	1.3	0.6
Coupling Finishing					
Coupling Cutter					
Personal			133	3.1	0.8
			148	5.0	1.1
			163	4.7	1.2
BZ	273	6.1	277	16.0	6.0
Lathe Operator					
Personal			152	1.8	0.5
			153	1.5	0.3
			154	1.2	0.3
			155	1.7	0.7
			217	3.4	1.1
			218	2.5	0.7
			220	3.8	0.9
			224	2.8	0.6
			225	2.3	1.1
BZ	115	8.0	116	12.9	4.3
	117	1.4	118	3.0	0.1
Mill Operator					
Personal			219	3.4	0.8

Johns-Manville

Operation	Impinger		Membrane Filter		
				Fibers/cc	
	Sample #	mppcf	Sample #	Total	10 μ+
Coupling Finishing (cont.)					
Drill Operator--BZ	173	0.8	174	2.7	0.5
	249	0.2	239	0.2	0.0
Tester-- Personal			149	5.7	2.5
			258	2.0	0.7
BZ	280	0.1	279	2.7	0.6
Inspector					
Personal			214	1.2	0.3
			261	1.6	0.4
Forklift Sweeper					
Personal			223	1.4	0.3
			227	2.1	0.4
			143	1.2	0.4
Lathe Operator					
Gen.	25	0.2	27	8.5	0.8
	J26	0.2	B28	3.7	0.8
	17	1.9	19	1.3	0.2
	J18	0.5	B20	2.4	0.6
	9	0.9	11	1.9	0.8
	J19	0.7	B12	2.7	0.3
Epoxy					
Special fitting and molding					
Personal			134	4.5	1.5
			135	2.7	0.6
			215	10.1	3.0
			253	1.4	0.6
BZ	238	0.2	237	2.4	0.7
Gen.	13	0.4	15	3.1	0.4
	J14	0.8	B16	3.1	1.1

Johns-Manville

Operation	Impinger		Membrane Filter		
				Fibers/cc	
	Sample #	mppcf	Sample #	Total	10 μ+
Epoxy (cont.)					
Pipe lining - probe operator					
Personal			254	0.6	0.1
			255	0.2	0.2
			268	0.3	0.2
			269	1.5	0.5
			273	1.3	0.4
			274	2.2	0.6
			276	3.3	1.3
Packing					
Unit Loader					
Personal			140	1.2	0.2
			141	0.7	0.3
			147	2.3	0.5
			150	1.8	0.4
			157	2.1	0.3
			158	2.2	0.7
			160	2.9	0.6
			161	1.3	0.3
Miscellaneous					
FWC Shop					
Personal			245	0.7	0.2
			246	0.1	0.0
			247	0.2	0.1
			248	0.4	0.0
			264	0.2	0.1
			265	4.4	0.3
			266	1.9	0.2
			267	0.1	0.1

Johns-Manville

Operation	Impinger	Membrane Filter		
			Fibers/cc	
	Sample # mppcf	Sample #	Total	10 μ+
Miscellaneous (cont.)				
Machine Shop				
Personal		210	2.1	0.6
		249	0.3	0.1
		250	0.5	0.0
		251	0.4	0.3
		252	0.5	0.2
		275	1.9	0.6
Electrician				
Personal		234	1.6	0.5
Inspectors				
Personal		259	1.0	0.4
		260	1.7	0.5
		262	1.5	0.4
		263	0.7	0.2
Forklift				
Personal		211	5.1	1.4
		212	2.6	0.6
Gen. Workers				
Personal		213	2.5	0.2
		226	1.9	0.5
		228	1.5	0.5
		231	0.5	0.2
		256	1.6	1.0