PLAINTIFF'S EXHIBIT
DUP-125

THE DISCOVERY COMPANY

UNION CARBIDE CORPORATION • MINING & METALS DIVISION • P.O. BOX 579 • NIAGARA FALLS, N.Y. 14302 • TEL.: 716-285-3311

August 11, 1972

Mr. E. A. Andre
Research Supervisor
E. I. du Pont de Nemours & Company
Marshall Laboratory
35th & Grays Ferry Avenue
Philadelphia, Pa. 19146

Dear Mr. Andre:

My apologies for not responding sooner following our telecon on July 26th.

Our products are chrysotile asbestos and are basically no different with regard to potential health hazards than any other chrysotile asbestos. Simple precautions will permit the safe use of "Calidria" Asbestos, especially in relatively small quantities.

The attached table contains fiber count data obtained by our Industrial Hygiene personnel. We feel that this data is typical and that the spraying or abrading of resin and similar materials containing relatively small quantities of "Calidria" Resin Grade asbestos contributes very little to the generation of free asbestos fibers.

We are obtaining additional lab and field data to substantiate our original findings and we would be glad to work with you in testing your particular product.

In discussions with OSHA personnel it is obvious that they are primarily concerned with large users of raw asbestos and not with products in which the fiber is held by a strong organic binder. I have received similar information from EPA personnel. A copy of current OSHA regulations is enclosed for your files.

As you are aware it is very difficult to cover this subject in a letter. If you have further questions I would be glad to discuss them at your convenience in Philadelphia or elsewhere.

Very truly yours,

'291

John L. Myers

cc: Mr. G. L. Dickson
NF-File

TABLE I

POLYESTER RESIN MANUFACTURE

AND APPLICATIONS

Application Type	"Thixotropic" Agent	Activity	Dust Counts: Fibers/ml.[1] >5μ	Dust Counts: Total Dust[2] MPPCF	Notes and Comments[3]
Large polyester manufacturing plant. (No special ventilation.)	None	Background prior to tests.	0.2 0.3 0.2	7.0 6.4 6.7	Breathing level of tank prior to operation. No typical asbestos fibers observed.
	Pyrogenic silica	Dumping 10 bags (200 lbs.) into thin tank over about 25 minutes.	1.3 1.0 0.6	28.4 38.6 24.2	Fibers counted not typical asbestos. Dumping rate slowed down to extend time for sampling. Not very careful handling.
	RG-244	~250 Pounds of pyrogenic silica dumped over 20 minute period. Wait 10 minutes. Dump ~250 lbs. of RG-244 over 23 min.	4.4 11.5 1.4	13.7 16.6 10.2	Samples taken over RG-244 dumping only. Dump completed 3 minutes into last sample. Dump of both pyrogenic silica and RG-244 made carefully. Fibers counted typical of asbestos.
	RG-244	Background 25 minutes after dump.	1.4	9.3	Fibers counted not typical of asbestos.
Large polyester manufacturing plant. (No special ventilation.)	RG-244	Dumping 5 bags (50 lbs.) of RG-244 in ~3 minutes.	2.8	9.6	Dumping completed after about 3 minutes of 10 minute sample. Typical asbestos fibers counted. Careful dump.
	Pyrogenic silica	Dumping 5 bags (50 lbs.) of pyrogenic silica in ~3 minutes immediately following RG-244 dump.	1.2	12.1	Dumping completed after about 3 minutes of 10 minute sample. Fibers counted not typical of asbestos.
Manufacture of polyester shower stalls.	~0.6% RG-244 and ~0.5% pyrogenic silica	Spraying on mold exterior to manufacture shower stalls. Typical air supported chopper gun.	1.4 1.3 1.0 1.2 1.0	12.4 11.8 16.1 14.0 12.4	Fibers counted not typical of asbestos. No fibers observed that could be identified as fiber glass.

DUP 0902873

Table I - Continued

Application Type	"Thixotropic" Agent	Activity	Dust Counts: Fibers/ml.[1] >5μ	Dust Counts: Total Dust[2] MPPCF	Notes and Comments[3]
Large polyester fiber glass boat yard.	~0.5% RG-244 and ~0.5% pyrogenic silica	Typical laminating operations. Standard air-supported chopper gun.	1.1	19.1[a]	Samples taken at breathing zone of operator spraying into a boat mold. Samples marked (a) taken during gel coat spraying about 50 feet away which fogged entire building.
			0.9	22.3[a]	
			0.8	12.4	
			1.2	17.6[a]	
			1.3	10.8	Fibers counted not typical of asbestos.
→	~0.5% RG-244 and ~0.5% pyrogenic silica	Edge grinding of cured resin boat hulls and inserts. Outdoors.	3.0	---	Fibers counted not typical of asbestos. Wind was quite strong and changing directions frequently. Heavy cloud of visible dust produced.
			2.3	---	
			2.1	---	
Large polyester furniture coating manufacturer. Good building ventilation.	~0.06% RG-244	Hand sanding polyester coatings.	0.002	1.6	
			0.002	1.9	
			0.003	1.9	
		Large power sander with integral hood sanding polyester casting.	0.001	0.6	Small amount of dust found apparently generated during stacking of sanded parts.
			0.002	2.6	
			0.002	3.5	
		Mold filling area. (Liquid polyester poured.)	0.001	1.0	
		Mixing area where RG-244 added to liquid polyester.	0.004	3.8	Background dust from pecan shell flour and ground perlite used in blend.
			0.007	5.4	
			0.005	4.1	

(1) Present OSHA standard for asbestos fibers (~5 microns in length) is 5 fibers per milliliter as an 8-hour time-weighted average. 10 fibers per milliliter may be allowed for no more than 16 minutes per hour for up to 6 hours in an 8-hour day.

(2) MPPCF - Millions of particles per cubic foot of air. The present OSHA standard for amorphous silica is 20 MPPCF, and the existing OSHA standard of 50 MPPCF would apply to both fibrous glass and the dust from polymerized styrene.

(3) All samples taken at breathing zone level of operator. 10 minute collection time unless noted.

DUP 0902874