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UNION CARBIDE

INTERNAL CORRESPONDENCE

MINING AND METALS DIVISION

P. O. BOX 579, NIAGARA FALLS, NEW YORK 14302

PLAINTIFF'S EXHIBIT UC-238

To (Name) Dr. H. B. Rhodes
Division Mining & Metals Div.
Location Niagara Falls, NY

Date July 16, 1974

Originating Dept. "Calidria" Asbestos

Answering letter date

Copy to E. J. Kleber
File
Gloria Faulring
J. L. Myers
W. C. Thurber
P. McDaniel

Subject Fiber Loss on Millipore Filters Due To Handling

As you know, we have heard from time to time conflicting stories on the Millipore filter's ability to retain fibers after handling. My recent trip to King City appeared to be a good opportunity to check loss due to handling since the filters were to be read at King City and then returned to Niagara. One group was sent back via UPS, one via Parcel Post and the remainder was carrier back in the case that is normally used to transport the personal sampling pumps and filter cartridges. In all cases, the only handling they had prior to shipment was the normal cutting of a wedge for microscopic examination. The remaining portion of the filter was immediately replaced in the cartridge. Another wedge was cut out and examined upon their arrival at Niagara. The results of these fiber counts are as follows:

Sample No.	Fiber Count Performed At King City (fibers/cc 5)	Method Of Transportation	Fiber Count Performed At Niagara (fibers/cc 5)	Gain or Loss Fibers/cc 5
F-7	3.2	Hand-Carried	2.7	-0.5
E-1	3.3	" "	3.2	-0.1
F-13	4.3	" "	4.3	0
E-17	0.1	" "	0.2	+0.1
E-23	4.9	UPS	4.8	-0.1
E-18	2.7	"	2.6	-0.1
F-7	3.2	"	2.9	-0.3
E-4	1.7	Parcel Post	1.8	+0.1
F-1	4.2	"	3.7	-0.5
E-6	7.9	"	7.1	-0.8
E-16	6.5	"	6.9	+0.4

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Although the losses outnumber the gains, it doesn't appear to be a definite trend.

Gloria Faulring reported significant losses when sample cartridges were "rolled" down a hallway. I can't help wondering whether her samples were handled more than mine and if so, does more handling tend to reduce the electro-static charge on the filter, causing fibers to fall off easier.

If you wish to pursue this any further, please let me know.

E. J. Kleber

EJK/mlv

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