



INTERNAL CORRESPONDENCE

PLAINTIFF'S EXHIBIT

UC-3713

xc Mike Elling

RECEIVED
MAR 31 1978
E. E. ELLING

METALS DIVISION

To (Name) Mr. W. C. Thurber
 Division Metals Division
 Location Union Carbide Corp.
 270 Park Ave.
 New York, NY 10017

Copy to

• P.O. BOX 578 - 4625 ROYAL AVE., NIAGARA FALLS, NEW YORK 14302

Date March 28, 1978
 Originating Dept. Mineral Products Technology
 Answering letter date
 Subject Speculative Operating Cost Estimate
 Silane Treated Asbestos
 Dresser Process

Dear Bill:

I have estimated that the operating cost to produce a silane-treated leached asbestos product by a competitor would be in the \$0.70 per pound order of magnitude. This cost does not include the price of the silane.

I made several assumptions in arriving at this figure which includes a production rate of 1000 lb. product per shift. I assumed three shifts per day and five days per week or a nominal capacity of 750,000 lb. product per year. It also assumes that the manufacturing would be associated with another facility rather than a "gross roots" operation. I have also neglected any allocated expenses or corporate overhead.

These costs are summarized as follows:

<u>Item</u>	<u>Cost - \$/lb. Product</u>
Direct Labor	0.373
Indirect Labor	0.056
Direct Materials (Ex. silane)	0.2175
Indirect Materials	0.0435
Total Operating Cost (Ex. silane)	0.69

Very truly yours,

R. G. Woolery
 R. G. Woolery

RGW/bsn
 Attach.

SPECULATIVE OPERATING COST ESTIMATE

SILANE-TREATED ASBESTOS

DRESSER PROCEDURE

<u>Item</u>	<u>Price</u>	<u>Quantity</u>	<u>Cost \$/ton Product</u>
A. <u>Direct Material</u>			
1. Asbestos	\$120/ton		
Shipping	<u>70/ton</u>		
	\$190/ton	1.2	\$ 228.00
2. H ₂ SO ₄	53/ton		
Shipping	<u>15/ton</u>		
	\$68/ton	0.44	30.00
3. NaOH	\$380/ton	0.30	114.00
4. Methanol			30.00
5. Fuel			20.00
6. Bags + Pallets			13.00
7. Silane			<u>Not Included</u>
Total Direct Materials (Exc. silane)			\$435.00
B. <u>Indirect Materials</u> Including utilities @ 20% of A			87.00
C. <u>Direct Labor</u>			
	<u>Per shift</u>	<u>Per day</u>	<u>@</u>
1. Operators - Dryer/Bagger	1	3	\$9.00/hr. 144.00
Leach Circuit	1	3	9.00/hr. 144.00
Filter	1	3	9.00/hr. 144.00
Foreman	1	1	10.00/hr. 160.00
Maint.	1	<u>1</u>	9.50/hr. <u>152.00</u>
		11	\$746.00
D. Indirect Labor @ 15% of Direct			\$112.00
Total cost per ton of silane product (Exc. silane)			\$1,380/ton \$.69/lb.