

July 1, 1943

CAUTIONS
Room 2113 Temp 6

MEMORANDUM

TO: Mr. A. B. Tatistcheff
Combined Raw Materials Board
Room 4749 SSB

FROM: W. T. Meloy, Director
Cork, Asbestos & Fibrous Glass Division

SUBJECT: Substitution of Other Rhodesian Chrysotile Asbestos Fibres
and C & G Grades

In accordance with your request, following is the situation on the previous history of substituting HVL and VRA fibres for C & G fibres.

In the first place, the C & G/3 and C & G/4, as we understand, are not critical; and supplies of these fibres are ample for the United Kingdom and the United States. However, last fall we arranged to have 10 tons each of VRA/3 and VRA/4 sent to the United States for experimental purposes. These fibres were evaluated by Johns-Manville Corporation, which is the chief user of these grades, outside of Keasbey & Mattison. They found that the fibres were talcy and not equivalent to the C & G grades and they would not use them under any circumstances. Mr. Muenleck, President of Keasbey & Mattison, stated that they would have no use for the VRA/3 and VRA/4 grades.

In the case of HVL/3 and HVL/3XX, Johns-Manville had previous experience with these fibres and found that they are not suitable for their use. Mr. Muenleck agreed that he could take 50 percent HVL/3 in place of C & G/3; however, he has no use whatsoever for the HVL/3XX.

In the case of the VRA/2 and HVL/2, it would be important at this time to investigate their suitability for C&G, if it were not already done. Last spring we arranged for a sample of VRA/2. This fibre was very carefully examined by Raybestos-Mannattan, Inc., which is the principal user of the C & G/2 grade. They made very careful tests of VRA/2 against C & G/2, and it was found that the shrinkage as received, after crushing and after opening, was considerably in excess of C & G/2. The card shrinkage, as well as the core roving waste, was

about double. The tensile strength of the yarn was about 100 per cent less. This fibre might be used in an emergency, as a substitute for C x G, but its value under any test, whether laboratory or production, is decidedly less.

Last summer we had the Raybestos-Mannetter, Inc., produce some HVL/2 for test. To quote from a letter from Mr. Thompson, Vice President of Raybestos-Mannetter, Inc.:

"As I mentioned to you when at the meeting on Friday, September 25, Turner & Newall may produce some HVL/2 from the Havelock Mine, which may be used in part as a substitute for C x G. They were going to experiment with this fibre and assess the value of the grade, and after the production of HVL/2 became standardized, they will, no doubt, send us a sample so we can try it in our mill.

"We received this information from Mr. Thompson, of Turner & Newall, during the latter part of August, and on September 21, received a letter from them stating that supplies of HVL/2 are likely to continue for some considerable time, so suffer from surface contamination. We feel sure that you will not wish to receive any material which is not up to proper standards and representative of continuous supplies. We therefore propose to leave the order on our books for completion as soon as the position at our Mines makes this possible. This being so, the consignment will be invoiced at the price ruling at date of shipment.

"We shall, no doubt, receive additional information from Turner & Newall as the year progresses, and will keep you advised as soon as we find out what this is a usable fibre in our production."

Until Turner & Newall sees fit to send these samples, we cannot have them offered. If samples of HVL/2 are submitted, we will make certain that they are thoroughly tested by the works in this country.

It seems to us that the English would like to force us to use the production of HVL/2, which is not equivalent in value to the C x G grades. They claim that these grades are fully equivalent to C x G but if they are, they are certainly very welcome to keep these other grades and we will be glad to take the C x G grades.

W. T. Morley