THE SARANAC LABORATORY
For the Study of Tuberculosis, Occupational Disease, and Industrial Hygiene
Founded by EDWARD LIVINGSTON TRUDEAU 1885
7 CHURCH ST SARANAC LAKE NEW YORK

P. O. Box 561
Reference:

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PLAINTIFF'S EXHIBIT

DOW-1077

Mr. M.D. Burch
Director of Personnel and
Industrial Relations
Owens-Corning Fiberglas Corporation
642 National Bank Building
Toledo 1, Ohio

Dear Mr. Burch:

I believe I should point out to you that the articles whic. I published recently on the biological action of glass fibers were based on experiments conducted at the Saranac Laboratory during the period 1936 to 1947, all initiated by the late Dr. Leroy U. Gardner. Basically these experiments fell into two categories, namely, injection studies and inhalation studies.

The injection studies were of an entirely artificial nature from the point of view of industrial medicine. They were conducted with a glass fiber product which we had artificially reduced to a dust state. I can foresee no circumstances under which a commercial glass fiber product would, under normal industrial circumstances, be introduced into the human body in the form of this dust. Our interest in this product was purely academic.

The inhalation phase of the research work was conducted on a product furnished by Owens Corning and, according to information furnished us, the glass fibers were reduced to particulate form for the purposes of the experiment by a process of hammer milling at the Owens Corning plant prior to shipment to the Saranac Laboratory. It is also my understanding that fibers such as these have no commercial use.

The glass from which glass fibers are made, though it contains silica, is not toxic because the silica is combined with the other ingredients of the glass. Glass is a silicate. In our various experiments in this laboratory silicates, with one exception, have been found to be relatively harmless compared to minerals containing free silica. The exceptional form is asbestos. Our interest in the glass fiber arose out of the fact that it is fibrous and we had previously shown in this laboratory that asbestos dust is harmful only if inhaled in a fibrous state. The results of the experiments with glass fibers are of interest in that they showed that length of fiber is not the only factor concerned in the causation of lung fibrosis, inasmuch as asbestos does cause fibrosis and glass fibers cause no such fibrosis.

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I should point out, too, that our experiences with dusts of a great variety of kinds have emphasized the fact that only dust particles smaller than 10 microns in diameter can cause lung damage whereas particles greater than 200 microns cannot even be retained in the lungs. To the best of my knowledge the glass fibers which are currently on the market are produced in a filamented form exceeding a 200-micron length many fold. As you know, a fiber 200 microns long is so small that it is barely visible.

Yours sincerely,

G.W.H. Schepers, M.D., D.Sc.
Director

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