PLAINTIFF'S
EXHIBIT
DUP-1465

bcc: Dr. Sidney S. Pollack
Carnegie Mellon University
MR-1311-001

MR-1311

September 1, 1970

Dr. Sidney Speil
Director of Research
Piping and Mining Division
Johns-Manville Corporation
Johns-Manville Research and
Engineering Center
Manville, New Jersey 08835

Dear Dr. Speil:

At the third meeting of the Philadelphia Ad Hoc Committee on Spraying of Asbestos Insulating Material on August 4, 1970, I had a brief discussion with you after your presentation. I mentioned some of the work that we were carrying on in this Company in connection with employee exposures to asbestos fiber dust. As part of the investigation we have had some x-ray diffraction analyses carried out for us by an outside laboratory. One of the minerals that has been identified in our material is Grunerite, which is described as a type of anthophyllite and has the approximate composition $(FeO.\ 9\ MgO)\ 7OH_2\ Si_8O_{22}$.

The x-ray diffraction laboratory has need of a standard sample of Grunerite. Would it be possible for you to provide me with 50 or 100 milligrams of such material, or could you tell us where I may obtain such a sample?

Thank you for your help. Kindest regards.

Sincerely,

ORIGINAL SIGNED BY
JAMES F. MORGAN

James F. Morgan

JFM/jtd

DUP 0973625

DU 045229

MR-1311-001

September 28, 1970

Dr. Sidney S. Pollack
Mellon Institute
4400 Fifth Avenue
Pittsburgh, Pa. 15213

Dear Sid:

Under separate cover I am sending you a sample of Grunerite for use as an internal standard. Enclosed is a copy of a letter which describes the origin of this sample. I am also sending you a copy of an electron photomicrograph.

I should like to discuss with you at your earliest convenience at Mellon Institute the results you have obtained to date on the samples I sent you on August 12, 1970.

Please let me know of a date that would be agreeable to you. One day next week would be agreeable to me.

Kindest regards,

Sincerely,

James F. Morgan

JFM/bjd
Encls.(2)

Enclosures:

(1) Xerox copy of letter of September 16, 1970 of Dr. Sidney Speil to Mr. James F. Morgan on Grunerite.
(2) Electron photomicrograph of Grunerite.

DUP 0973626

DU 045230

Johns-Manville

Research & Engineering Center

P. O. Box 159
Manville, N. J. 08835
(201) 722-9000

September 16, 1970

Mr. James F. Morgan
E. I. duPont de Nemours & Company
Employee Relations Department
Wilmington, Delaware 19898

Dear Mr. Morgan:

It was a pleasure hearing from you. I am particularly intrigued by the identification of Grunerite in what I presume is a dust sample at one of your locations.

Grunerite is an amphibole which in most mineralogy books is indicated as being fibrous or columnar. We do not normally regard it as a member of the asbestos family of amphiboles since it is so harsh that it does not yield a "fibrous" product.

Under separate cover I am sending to your attention a sample of Cummingtonite schist from the Homestake Mining Company in Lead, South Dakota. This material has been identified by us as Grunerite with a slight impurity. Attached are the approximate analyses and an electron micrograph of the material.

Confirming our discussion at Philadelphia, we would be very glad to discuss with you at any time your program in connection with employee exposures to asbestos fiber dust and offer any assistance based on our long experience in this field.

Very truly yours,

Dr. Sidney Speil, Director
Corporate, Mining & Pipe Divisions

SS/rs

Mr. James F. Morgan
E. I. duPont

Attachment
September 16, 1970

Analyses of Grunerite Sample

Sample Description: Cummingtonite Schist
from - Homestake Mining Company
Lead, South Dakota

Sample No. 3647-152-1

X-ray Identification: Grunerite $[(Fe, Mg)_7(OH)_2 Si_8O_{22}]$
and a trace of chlorite.

Petrographic: Major - amphibole mineral with optical properties close to grunerite, a member of the cummingtonite series.

Minor - chlorite

Spectrographic:

Major - iron, magnesium, silicon

Minor High - aluminum
(5-10%)

Minor Low - calcium
(1-5%)

Small - manganese, sodium
(< 1%)

Very Small - chromium, copper, titanium, zirconium
(< 0.1%)

Electron Micrograph: Attached

S. Speil

DUP 0973628

DU 045232