

CUST # 320

TO: A. P. GREEN REFRACTORIES COMPANY - G. E. WERNER APRIL 10, 1979

FROM: #151 RESEARCH - K. S. FREEMAN

SUBJECT: SEM MICROGRAPHS OF EXPANDED VERMICULITE

PLAINTIFF'S EXHIBIT

USG-1669

The enclosed SEM micrographs show the presence of asbestiform particulates in both the coarse and fine fractions of the vermiculite from Sulfur Springs, Texas, and also in the No. 3 vermiculite sample from Troy, Idaho. The No. 2 vermiculite sample from Troy, Idaho did not show any asbestiform particulates.

We do not have the capability at the Research Center for determining whether or not the asbestiform particulates are any of the six minerals that are defined as asbestos in the OSHA Standard. However, the MSDS from W. R. Grace for expanded vermiculite from Libby, Montana, which presumably would supply the Troy, Idaho, and Sulfur Springs, Texas, plants, states that the product contains Tremolite and also states that the product may contain "asbestos fibers".

In the face of this evidence, USG must assume that the "fibers" are asbestos. I would appreciate a crystallographic analysis by your laboratory to determine whether or not the "fibers" in these products are any of the six asbestos minerals that are cited in the OSHA Standard.

KSF

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UNITED STATES GOVERNMENT

CONFIDENTIAL



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A. P. GREEN REFRACTORIES CO.

MEXICO, MISSOURI 65265 U.S.A. PHONE: 314 473-3626 CABLE ADDRESS: "GREENCO"

March 7, 1979

Mr. Ken Freeman
U. S. Gypsum Research Center
1000 East Northwest Highway
Des Plaines, Illinois 60016

Dear Ken:

We are submitting four samples of vermiculite, to be screened for asbestos.

Very truly yours,

A. P. GREEN REFRACTORIES CO.

Glen E. Werner
Environmental Control

GEW/d1

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