



walter c. mcrone associates, inc.

CONSULTING: ULTRAMICROANALYSIS • MICROSCOPY • SMALL PARTICLE PROBLEMS • SOLID-STATE CHEMISTRY

① CMM
Sent to
Talc Sales 3/25/80

Gentlemen: - As you can see, McCrone thinks tremolite is asbestos. - This was a sample of Continental Minerals Cycloclast that was sent for analysis by C-2. This would reflect the so called "free of asbestos" certification Continental is telling its customers regarding their California talcs (the old J-M Grantham product)

18 March 1980

JM 3/25/80

file
Mr. Joseph Blashka
Crown Zellerbach
Camas, Washington 98607

Dear Mr. Blashka:

We have completed our examination by transmission electron microscopy and selected area electron diffraction of the talc sample C-2, Camas which you submitted for determination of asbestos content.

The sample was prepared by suspending a small portion of the powder in ethanol and ultrasonerating, to break up any aggregates. A small drop of the suspension was then placed on a previously carbon coated transmission electron microscope grid and allowed to dry. This grid was then examined in the transmission electron microscope.

During this examination particles with a fibrous morphology, that is an aspect ratio greater than 3:1, were examined by selected area electron diffraction to determine their crystallography. Based on this selected area electron diffraction it was determined that a proportion of the sample consisted of a fibrous amphibole, tentatively identified as tremolite, and that this proportion was less than 10%.

It should be pointed out that fibrous tremolite is defined in the Federal Register as asbestos, and that for the purposes of this definition a fiber is defined as a particle having an aspect ratio greater than 3:1, that is a length to width ratio of greater than 3:1. The tremolite particles observed in your sample, therefore, would be classed under existing OSHA regulations as asbestos.

Thank you for consulting McCrone Associates. If you have any questions concerning this report please contact us.

Yours sincerely,

Richard M. Ellis, Jr.
Research Microscopist

PLAINTIFF'S
EXHIBIT
CAM-251

RME:gb
Ref: MA 8802
cc: Lou Murino
Gordon Gill

RECEIVED

MAR 25 1980

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