

To: W. P. LEDER

SEPT. 15, 1977

From: A. H. NICKOLAUS

PLAINTIFF'S
EXHIBIT

DUP-477

ASBESTOS IN TALC

REF. 1 LETTER: PFIZER MINERAL, METALS & PIGMENTS DIVISION
TO A. D. CYPHERS, FEB 9, 1977

REF. 2 LETTER: PFIZER TO CYPHERS, AUG. 25, 1977

The first letter notified us of changes in the asbestos exposure limits (which we already knew) and the asbestos content of two of Pfizer's talcs. Apparently the letter was sent to all of Pfizer's customers since we have bought materials from them but no talc, at least ^{NOT} in the past 4-5 years and as far as people can remember - never. We do not have any of their ~~stale~~ or anybody else's talc on plant that we are aware of.

I do not have a copy of the report mentioned in the second letter but I gather from the letter's content it discusses difficulties in the talc analysis.

Copies of both letters are attached.



PFIZER INC., 235 E. 42ND ST. NEW YORK, N. Y. 10017

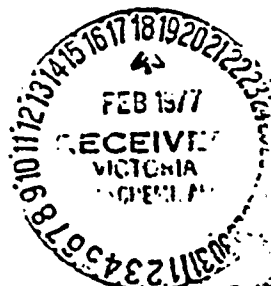
I'd like for us to review and spot check

any handling to
see how well
were doing it.

In recent months there has been increasing interest in the subject of talc, particularly with regard to the nature and extent of its asbestos content. Since you are one of our many valued talc purchasers, we feel you should be aware of important information on this subject.

The Occupational Safety and Health Administration (OSHA) currently has in effect an asbestos standard which prescribes that employees may be exposed to no more than 2 asbestos fibers per cubic centimeter of air for an 8-hour time-weighted average, and to no more than 10 asbestos fibers per cubic centimeter at any time. In October, 1975, OSHA proposed to lower the 8-hour time-weighted limit to 0.5 asbestos fibers per cc. and 5 asbestos fibers per cc. for any period not exceeding 15 minutes. Very recently it has been reported that the National Institute for Occupational Safety and Health has recommended the respective permitted exposure levels be limited even further - to 0.1 asbestos fibers and 0.5 asbestos fibers per cc.

In its' October, 1975 proposal, OSHA defines asbestos to include chrysotile, amosite, crocidolite, tremolite, anthophyllite and actinolite, and every product containing any of these minerals. OSHA also defines an asbestos fiber as a particulate form of any of these minerals which is longer than 5 micrometers, and has a maximum diameter of 5 micrometers and a length to width ratio of at least 3 to 1.



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The reason for the proposed revision of the standard for occupational exposure to asbestos is that asbestos, in its several commercial forms, has been associated with the production of not only asbestosis but a variety of cancers and malignancies. Because of the many unknown factors, including the variability of individual response to carcinogens and the absence of data to establish a safe level, OSHA has concluded that employee exposure must be reduced as low as is feasible. OSHA proposes to hold hearings on the entire subject, but until those hearings and subsequent deliberations take place there will continue to be considerable uncertainty.

Nevertheless it is prudent for your workers, while using any talc which might contain asbestos fibers, to avoid creating dust to the extent possible. Monitoring procedures should be employed to determine dust concentrations under working conditions. Where appropriate, dust control equipment or use of respirators should also be considered, and worker training programs implemented. You will no doubt wish to review the various provisions of the OSHA standard for occupational exposure to asbestos (29 Code of Federal Regulations 1910.1001) and the proposed amendments which appeared in the October 9, 1975 issue of the Federal Register.

Since we have no control over the conditions of use of talc products in your plant, it is not possible for us to indicate the airborne fiber concentrations which could possibly result from your use of talc. However, we can provide information on the asbestiform mineral content of the talcs we supply.

Pfizer research has developed the most accurate and sensitive method available today of analyzing for asbestos and asbestiform minerals in talc. This method, based on step scanning x-ray diffraction, electron diffraction, and transmission electron microscopy, permits identification of true chrysotile asbestos at levels of 0.5% and fibrous amphiboles, such as tremolite, at levels as low as 0.1% in the talc. No other identification methods in use today, including optical microscopy and scanning electron microscopy, are as sensitive and as direct.



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Pfizer routinely monitors its' talc production, using this sensitive methodology. Based on many months of evaluation, we can state that:

The California CP talcs which you purchase normally contain between 1% and 5% total tremolite with a fiber content of less than 0.1% by weight (the practical detection limit of the analytical method).

The Montana MP talcs which you purchase contain no detectable quantities of tremolite or any of the asbestiform minerals. Thus, you can employ these MP talcs with full assurance that you are fully in compliance with the OSHA asbestos worker exposure standard.

We believe that it is in your best interests and ours that information on this subject be brought to your attention. We trust you will find this letter useful, and that you will follow the OSHA hearings and other developments as they occur. We will continue to monitor these hearings and try to keep you aware of significant developments. If you have any questions, please do not hesitate to contact us.

Very truly yours,

J.P. Bartels
President

JPB:sp

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MINERALS, PIGMENTS & METALS DIVISION

PFIZER INC., 235 E. 42ND ST. NEW YORK, N. Y. 10017

August 25, 1977

Mr. A. D. Cyphers, Plant Mgr. H.S.
E. I. DuPont DeNemours & Co.
P.O. Box 2626
Victoria, TX 77901

Dear Mr. Cyphers:

Since I wrote you in February with information on Pfizer talc products relative to the OSHA asbestos regulation, the National Bureau of Standards has issued a lengthy report⁽¹⁾ covering their analysis of 80 industrial talc samples by the OSHA procedures. We suspect this report may have raised additional questions in your mind and would like to take this opportunity to explain Pfizer's position on the subject.

The initial request to the NBS from Dr. Morton Corn, Assistant Secretary of Labor, OSHA, was twofold:

1. "to resolve the variability in the definition of asbestos fibers in talc."
2. "to determine the asbestos content of some 80 talc samples to be provided by OSHA" - using only the OSHA defined optical microscopy method.

Prior to commencing the program, agreement was reached between OSHA and the NBS that the first task "would be a complex, long-term program which would require input from a number of sources both in the private and public sectors" and that the more limited task of determining the asbestos content of the samples would be addressed by NBS first.

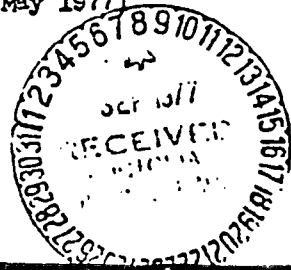
After completing the 80 sample analysis NBS concluded that:

"The variability of these results raises several questions regarding the OSHA procedure, particularly sampling technique, sample homogeneity and determining fiber morphology. It is the opinion at NBS that, even under favorable circumstances (e.g., homogeneous samples, easily identified fibers, etc.) the existing OSHA procedure is useful only for determining 'fiber' content and not 'asbestos' content....NBS believes that the resolution of the measurement problem, including the definition and

- (1) LaFleur, P.D.; National Bureau of Standards, Institute for Materials Research; A Report on the Fiber Content of Eighty Industrial Talc Samples Obtained From and Using the Procedures of the Occupational Safety and Health Administration; Washington, D.C. (May 1977)

Cyphers ☒
Greenbaum ☒
Brennan ☐
Robertson ☐
Sampson ☐
Smith ☐
Street ☒
Stet ☒ See *quantities*
Target ☐
What does report show?

Where do we use talc?
What is problem magnitude?
Can't we stop using?
I don't believe we use any substantial quantities. Let's check out. J.S.



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identification of asbestos, will be accomplished only by significant changes in the procedure and probably the method as well."

The analysis of talc samples presented special problems to the NBS scientists. Their report states, "In the case of talc samples, one must also judge which of the apparent fibers are talc platelets seen on edge. It is possible to 'roll over' some of these platelets by moving the cover plate slightly, but while doing so, one may also 'roll' another platelet into a position where it would subsequently be viewed from the edge." Based on Pfizer's experience and the above statement in the NBS report, we question the conclusion that the OSHA method is valid even for determining the fiber content of talcs. The fact that even a highly trained microscopist can misinterpret talc platelets on edge is a key problem which remains unresolved.

Pfizer has maintained a consistent posture since the talc-asbestos issue was first raised. Rather than entering the controversy over the definitions in 29 CFR 1910.1001, we have accepted the regulation as binding on both users and suppliers of talc and have invested our technical resources in developing sensitive, accurate, unambiguous analytical procedures to determine the mineral and fiber contents of our talc products.

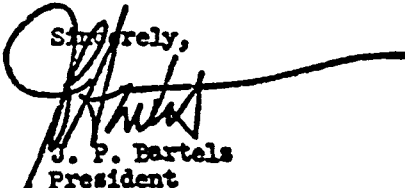
The fact that the NBS report confirms the inadequacy of the OSHA test method does not relieve you or your suppliers from complying with the asbestos regulation. To assist you in attaining compliance, Pfizer began in 1973, as part of our quality assurance programs, to routinely monitor our talc ore as it is mined and our finished products using the most sensitive analytical methods available. Based on this extensive testing, we are pleased to be able to reaffirm these facts about Pfizer talc products:

1. Montana (MP series) talcs contain no detectable quantities of tremolite or any of the other asbestiform minerals.
2. California soft (CP series) talcs normally contain between 1% and 5% total tremolite with a fiber content of less than 0.1% by weight (the practical detection limit of the best analytical method).
3. California hard (CF series) talcs contain 20% to 30% by weight total tremolite of which more than half meets the OSHA criteria for fibrous asbestos particles. Therefore, when using these CF talcs, you should take appropriate measures to insure compliance with the asbestos regulation.

We are confident that the regulatory agencies will soon agree upon a more precise method and that the controversy surrounding asbestos in talc will be resolved. In the meantime, you can be assured that Pfizer will continue its rigid quality control program to insure that the talc you buy from us is as represented. We will continue to follow the developments and will advise you of significant changes as they occur.

We invite you as a talc consumer to contact us anytime we can be of assistance.

Sincerely,


J. P. Bartels
President

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