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DOCUMENT DESCRIPTION: Union Carbide Internal Letter from Medical Dept to Legal Dept RE Calidria Asbestos Study - Contesting Company Interpretations

Barry Castleman's Union Carbide file

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__ bibliography of articles

__ abstract from scientific journal

__ single presentation from conference

__ entire proceedings from conference

__ industry report

__ government agency report

__ newspaper article

__ magazine article

__ National Safety News

__ NSC Transactions of Annual Safety Congress

__ memorandum

✓ letter

__ congressional testimony

meeting __ agenda ___ minutes ___ attendee list

__ other

PLAINTIFF'S EXHIBIT UC-960

UNION CARBIDE INTERNAL CORRESPONDENCE

UNION CARBIDE CORPORATION

270 PARK AVENUE, NEW YORK, NEW YORK 10017

To (Name) Mr. Robert F. X. Fusaro
Division Law Department
Location 47th Floor

Date May 22, 1973
Originating Dept. Medical Department
Answering letter date
Subject

Copy to

Dear Mr. Fusaro:

We have carefully studied the Calidria Asbestos study from Mining & Metals Division in Niagara Falls. The study was divided into a seven page report and a six page slide presentation.

Both were very well done and represent much study on the part of the author. However, we seem to differ in our interpretation of the literature as presented. Going through the seven page study, "The Safe Use of Calidria RG-244" and comparing it with the NIOSH criteria document for asbestos, paragraph by paragraph, we find these variations in interpretations.

Section 2, Asbestos Toxicology, paragraph 2. "It is important to note, however, that asbestosis and statistical excess occurrences of bronchogenic carcinoma (lung cancer), the two most common asbestos-related diseases, have occurred only in workers with long term exposures to massive concentrations of asbestos dust. The risk of this type of exposure is usually in asbestos mines and mills and in large manufacturing operations..." NIOSH III-7 reports "a number of trades experiencing

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intense intermittent exposures are also suspect" and "positive x-ray finding among individuals having had known exposures to asbestos as short as one day". III-8 says, "This excess of lung cancer was demonstrated among those workers with jobs which entailed heavy exposures irrespective of the duration of employment." III-18, "In 1968, Balzer and Cooper reported asbestosis among insulation workers exposed at levels not exceeding the time-weighted average of 5 mppcf."

On III-21, NIOSH states, "In a recent unpublished paper, Williams, Baier, & Thomas compiled data from the Pennsylvania Department of Health files on exposure levels at various textile processing operations in two plants. The data included dust concentrations from 1930 through 1967 in one plant and from 1948 through 1968 in the second plant. Even though controlled exposures were for the most part below 5 mppcf and in many cases below the 1968 ACGIH Notice of Intended Change to 2 mppcf, 64 cases of asbestosis were reported from these two asbestos textile plants. The authors conclude that: "If asbestosis is to be prevented, airborne asbestos dust must be stringently controlled in the working environment."

III-22 concludes, "Champion's two cases seem to support earlier data of family cases with reasonably short and/or low levels of exposure."

Concerning the risk due to mining and milling, the NIOSH document has this to say on pages 18 and 19 of Section III: "The authors (McDonald

et al) concluded that the additional data supports evidence of other studies that even heavy exposure to asbestos in mining and milling carries only modest risk of contracting lung cancer and less still of contracting malignant mesothelioma." Another quotation on page 19 is "Wright pointed out that others have noted the striking differences in the health experiences of workers in mines and mills as compared to other workers, specifically in comparison to insulation operations, but that he felt the question was still unresolved. In contrast to populations exposed to mixed environments, those engaged in the mining and milling of asbestos fibers showed no augmented frequency of bronchogenic cancer."

NIOSH concludes "Although it has been suggested that the risks associated with asbestos exposure may be less in mining than in industrial operations, additional study will be necessary to confirm if such is true, based upon the comparison made by Selikoff".

On pages 23 & 24 there are comments on the occurrence of two cases, one mesothelioma and one asbestosis, in floor tile installers, and specifically comments on the very low levels encountered in this work on a time-weighted average.

To continue with the third paragraph under Asbestos Toxicology, in which it is stated that chrysotile asbestos does not cause an excess of mesotheliomas. NIOSH in V-1 says, "The consumption of asbestos in this

country is overwhelmingly in the form of chrysotile. Where other forms of asbestos are used, such as crocidolite and amosite, they are often mixed chrysotile and are encountered alone, mainly in research and specialty situations." It is the predominant opinion of the scientific community that an excess of mesothelioma is found in workers in the asbestos industry in the United States.

In Section III, page 11, is found the statement "It must be pointed out that a clear picture of the relationship between the type of asbestos and the production of asbestosis, neoplasms, and mesothetiomas is not defined in the exposures reported."

NIOSH describes in III-22 a case of mesothelioma occurring in which "it was believed that he was exposed only to chrysotile...".

Continuing to paragraph 4 of Asbestos Toxicology, where it says "Finally, there is no evidence that the general public is in any danger from the amount of asbestos fiber in the community air. The U. S. National Academy of Science states in an October, 1971publication, "Asbestos- The Need For and Feasibility of Air Pollution Controls":

"At present, there is no evidence that the small number of fibers found in most members of the general population affect health and longevity."

We submit that these statements are not precisely the same.

In Section III, page 23, NIOSH states "...however, some question may be raised of a possible neighborhood exposure even it it only concerned going to work. The possibility of such exposure must be considered in view of the neighborhood case noted by Selikoff."

In Section 3 of "The Safe Use of Calidria", paragraph 3, there is discussion of the meaning of the phrase "exposed to asbestos", and the advice is given to follow the NIOSH recommendation that "exposed to asbestos" means "average exposures above one fiber per cc or peak exposures above five fibers per cc." This has no validity: the OSHA regulation is interpreted to mean "regular exposure to asbestos as part of the job, or exposure to asbestos as a usual part of a regular job assignment". There is no minimum number of fibers designated below which is not required to follow all the stipulated procedures if such an exposure occurs, and we feel we are obligated to give this information to customers.

In Section 4, "Calidria RG-244 in Polyester Resin" we question whether the sampling and counting were done by registered Industrial Hygiene Engineers; if they were not, then the results would not be likely to be acceptable to any regulatory agency, and we would not want to convey a contrary impression to a customer.

Section 5 - Silica Toxicology. This is not mentioned in the NIOSH document or the OSHA regulation. Is it part of "Safe Handling of 'Calidria' RG-244"?

In Section 6 - Dust Control. When exhaust ventilation is discussed it should be pointed out that it "shall be designed, constructed, installed and maintained in accordance with the American National Standard Fundamentals Governing the Design & Operation of Local Exhaust Systems, ANSI Z-9.2-1971". Failure to comply with this standard would lead to citation and penalty.

Slide Commentaries

Slide 3 - this is misleading.

Slide 4 - "excess" in fact may be less than the allowable concentration and "many" may be a few or less. Chrysotile is not an important distinction.

Slide 5 - massive long term exposure to asbestos has caused asbestosis and cancer, but so have some low level short term exposures: this is a half truth, and is misleading.

Slides 7 through 10 - the discussion of the varieties of asbestos is interesting but irrelevant to the fact that all varieties produce disease.

Slide 11 - we are discussing chrysotile: this is a diversionary tactic.

Slide 12 - advise deleting "strong" from the first sentence. Five cases did occur, and this is likely to be considered an excess for a group of 9304 employees. Dr. Selikoff has studied the John Manville manufacturing plant in New Jersey as well as the insulation workers.

Slide 20 - monitoring and record keeping requirements are stipulated in the regulation, including methods and frequency of monitoring. These requirements stay in force no matter how good the compliance is or how long it continues.

Slide 21 - the minimum medical examinations required are more extensive and specialized and frequent than those generally performed in industry, and therefore more expensive. The statement about NIOSH recommending "exposed to asbestos" to mean "average exposures above one fiber per cc" is obsolete and should be deleted. The OSHA regulation does not say this: they mean a regular exposure to any asbestos. There is no point in speculating or showing a slide of naturally occurring outcrops of asbestos.

Slide 25 - It is theoretically possible to ship, store, transfer and use asbestos without releasing any to the environment, but how many installations actually manage to do it? This glib statement makes a difficult job seem simple. The statement "More is probably known about the potential health hazards of asbestos and the proper means for controlling or eliminating them than would be the case with possible substitute materials." is certainly debatable: and is clearly not true universally.

Questions

Wasn't the Academy of Science quote regarding fibers found in most members of the general population rather than asbestos in air and water?

Dr. Selikoff's work is no longer limited to a "very limited group of workers, none of whom were exposed only to chrysotile". And importantly, don't forget chrysotile causes disease.

Very truly yours,

K. S. Lane, M. D.
Assistant Medical Director

KSL:lk