WRG 000353

CONSTRUCTION PRODUCTS DIVISION

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Date: July 24, 1970

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PLAINTIFF'S EXHIBIT WRG-553

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SUBJECT: Philadelphia Department of Public Health, Ad Hoc Committee on Environmental and Occupational Hazards of Asbestos Fibers Meeting, July 23, 1970, in Philadelphia

Attachment 1 - Meeting Agenda
Attachment 2 - Committee Roster
Attachment 3 - W. R. Grace-CPD View Graphs

} These 20 pages are attached to Mr. Egan's copy only. Additional copies will be provided as requested.

This meeting was a second in a series of three that are being held with the objective of recommending legislation and regulation with regard to sprayed fireproofing.

In this meeting, city governments, medical people, insurance companies, labor, sprayed fiber material manufacturers, contractors, architects, and industrial safety interests were represented. Close co-operation between New York City and Philadelphia governments was evident. Labor is objective, The medical people are conservative. The Ad Hoc Committee Chairman (Professor Gorson) stated that it is almost a foregone conclusion that stringent enclosure and clean-up regulations are necessary.

The Sprayed Mineral Fibers Manufacturers' Association had no data nor reasoned responses for the committee. Harvey Waxman, Jim Cintani, and myself were anchor men in the day's prolonged and sometimes emotional meeting; and we were the only group to present data.

Dr. Nicholson, who represents the Mt. Sinai Hospital group under Dr. Selikoff, substantiated the reasonableness of our data and general conclusion that even without complete enclosure the micron range fibers released to the atmosphere, due to mixing and spraying, were within the somewhat arbitrarily established but generally recognized threshold limit values. Nicholson further commented he felt the sprayed slurry of cementitious Mono-Kote type of fireproofing posed the least hazard of all types of sprayed fireproofing.

The prevailing feeling of the Committee was that asbestos free formulations are needed now, and will be available in time. In the future, the Committee would look for fiber free concepts and, eventually, all spraying will be outmoded. The Committee mentioned the possibility of in-bag wetting to eliminate air pollution associated with opening and dumping bags of dry mix.

There were extensive discussions of various types of asbestos, how they entered the body, the body reactions, and consequent diseases. It was clearly pointed out that the current threshold limit value criteria is based in large part upon investigations related to asbestosis, which is a disease that primarily reduces lung vital capacity. In contrast, lung cancer is inevitably fatal and should be a paramount consideration in establishing a fiber tolerance criteria. It was admitted that there is some correlation between the two general types of diseases and hence the current threshold limit value of 5 fibers over 5 microns may be useable for the moment (in recent years the criteria has dropped from 12 to 6, and now to 5 fibers).

The medical researchers are frustrated by an imperfect criteria, lack of data, and inadequate data gathering tools. Fiber collection on a Millipore filter and counting under an optical microscope is a general practice that is reasonable in cost and time but overlooks minute fibers and is dependent upon human interpretation. Widespread viewing of samples with a scanning electron microscope would allow counting of the smaller particles and identification with x-ray diffraction accessories. However, the cost and time requirements per sample are large and do preclude gathering of such data in large quantity.

The researchers find that both country air and city air in general is polluted with asbestos fibers that are indefinitely suspended in the air. Spray site levels of fiber count are roughly ten times the levels found in the countryside.

Mr. McCormick of the Asbestos Local #8 urged that the general contractor be held responsible for all precautionary measures associated with the spraying of asbestos, since the sub-contractor could not reasonably control the operations and Mr. Romer, Assistant Commissioner of New York City's Department of Air Resources, concurred.

There was discussion of various respirators that are available in this country and England. Workers could be supplied with clean filtered air via a long hose, or wear a battery powered apparatus that would filter air and pump it to the face mask.

Nicholson stated that eventual elimination of asbestos from construction is not practical and is not necessary. For example, floor tiles can contain asbestos with negligible possibility of releasing fibers to the atmosphere. Widespread use of asbestos in other areas such as brake linings may be more significant once asbestos is eliminated from fireproof coatings.

Professor Gorson pointed out that asbestos hazards were just as real as radiation hazards, and yet the former is relatively unregulated and the latter is tightly regulated.

Mr. Bresner, the Fire Coating Sub-contractor, stated that the Girard Trust Building in Philadelphia on which spraying has been stopped by court action will proceed with enclosure of floors by curtain walls prior to spraying. The outer faces of the steel structure would go unsprayed and the outside steel will be closed off with lathe and plaster.

Air contamination during demolition of buildings was clearly recognized by this committee. Mr. Romer pointed out that New York City experiences three thousand demolitions a year.

Enclosure during spraying by tarpaulin or plastic curtains is an imperfect containment method since high winds that frequently occur at higher levels result in torn tarpaulins, numerous leaks, etc.

Mr. Stanley Fonfa of the Spray-on Corporation and the Metropolitan Spray Company, an applicator, announced they have just passed UL testing of a mineral wool and portland cement formulation. U. S. Gypsum is supplying their mineral wool. No indication of UL ratings anticipated was made.

Dr. Williams, observer, commented that mineral wool was safer inasmuch as the fibers are more pliable and less prone to fracture into small fibers. However, Nicholson indicated he felt the mineral wool constituted a hazard of lesser magnitude. No data was presented on spraying of such a formulation.

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Mr. Fonfa indicated that he could supply 12,000 tons of the new formulation a year.

The committee chairman, Professor Gorson, asked if our consultant, Dr. Cooper, could be present at the committee's next meeting, August 4th, and we responded that such was quite likely since Dr. Cooper would be in Washington on the 5th.

We should give serious consideration to gathering several samples for scanning electron microscope analysis and presentation, along with conventional data gathered in the next several weeks, at the August 4th meeting.

Mr. James F. Morgan of the Haskell Laboratory for Toxicological and Industrial Medicine, E. I. duPont deNemours & Co., Wilmington, Delaware, would like to eliminate asbestos completely from hot pipe installation throughout the duPont facilities. Mr. Morgan is a contact to remember if we develop a vermiculite insulation for hot pipes.

David G. Powell

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