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AUG 12 1970
CONSTRUCTION PRODUCTS DIVISION
H. A. B.

TO: J. N. Beveridge

DATE: August 11, 1970

FROM: T. F. Egan

SUBJECT: City of San Francisco
Special Meeting
Asbestos Hazards
July 21, 1970

cc: R. M. Vining
K. W. Harrison
R. W. Sterrett
H. A. Brown
D. G. Powell
T. P. Feit
P. Kostic
C. H. Wendel
T. W. Pickthall

THIS COPY FOR

Dear Nelson:

Attached is the following information completely covering the official comments at this meeting.

Some non-recorded comments were:

(1) Question by Secretary Goldberg why no data was submitted on fiber type fireproofing - only cementitious. This is what prompted comments under tape 060 in minutes.

(2) Comment at end by Harry S. Grapp of U. S. Mineral Products Co. that they had an asbestos-free UL approved product and also, that it had been examined by Mellon Institute and contained no

(a) Crystalline Silica
(b) Mica
(c) Other known harmful elements

This was definitely intended to arouse question on vermiculite. It did not at this meeting, but it showed me that we can expect some questions from competitors on mineral content of vermiculite. They have been researching or had recent tests performed.

PLAINTIFF'S EXHIBIT
WR6-294

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The meeting was very orderly and objective. Walt Pickthall and Bob Chaney are to be commended for a fine presentation and preparation of facts and data. The Cooper-Tabershaw reports will be a great help.

The outline by Dr. Cooper will aid in understanding the development of asbestos and its medical investigation.

We are waiting for the date of the September meeting to cover preliminary regulations.

Yours truly,

Thomas F. Egan

TFE/jac

Attachments

BOARD OF EXAMINERS

SPECIAL MEETING - ASBESTOS HAZARDS

MINUTES OF MEETING

July 21, 1970

MEMBERS PRESENT: Messrs. Oliphant, Merrill, Degenkolb, and Guttman. Secretary Goldberg, Fire Insp. Jebe

MEMBERS ABSENT: Mr. Raffin

(TAPE 870) Meeting called to order by Chairman Oliphant at 7:10 PM.

Mr. Goldberg reviewed history of the problem, beginning with first available information in San Francisco in 1968. He noted the previous meetings of the Board considering the possible hazard and briefly reviewed actions by some Eastern cities as well as by the California State Division of Industrial Safety. He defined the several areas of possible hazard to construction workers as well as to the general public.

(TAPE 920) Dr. W. Clark Cooper, School of Public Health, University of California at Berkeley, introduced himself at the request of the Chairman, and outlined his experience with the insulating trades. He submitted an "Outline - Asbestos and Human Health." He concurred with the general view that a hazard exists and defined his presentation as a review to bring the problem into clear perspective with the present state of knowledge:

1. Controls and safeguards are needed to protect workers who are in contact with asbestos.

2. There is probably no significant special hazard to the general public.

3. Each of the five different types of asbestos require different safety techniques.

4. Knowledge of the subject is incomplete.

5. Asbestos bodies and similar bodies are found extensively in lungs of the general public. The extent to which asbestos is a significant factor is difficult to determine.

He concluded:

1. Asbestos fibers in sufficient doses certainly cause diseases.

2. It is not known how low a dose is safe.

3. Many bodies (other minerals, asbestos, etc.) can cause hazard. To sort them out is difficult.

4. Asbestos exposure must be reduced.

5. Dr. Cooper is working on study projects to define safety controls in asbestos-using industries.

(TAPE 1120) Dr. Selma Dritz, San Francisco Department of Public Health, defined the presently existing possibility of preventing further spread of severe effects of asbestos-caused diseases, and urged the Board to take necessary steps to control the industries.

(TAPE 1140) Mr. Douglas Fowler, University of California at Berkeley, cited measurement of number of asbestos fibers in ambient air at different locations at and near a construction site using asbestos materials. Measurements are stated in time-weighted averages over an 8-hour day. He submitted copies of report, "Asbestos Fiber Concentrations in Air From Spray Fireproofing Operations Using Zonolite Products" by Tabershaw-Cooper Associates, dated July 15, 1970.

(TAPE 1200) Mr. John Fisher, American Institute of Architects, cited use of insulating materials during many years, with no knowledge of the existence of any hazard. He stated that measurement of fibers in ambient air of a completed building has been made recently (at Bechtel Building).

(TAPE 1230) Mr. Goldberg asked for source of the figure of 5 fibers per milliliter.

Dr. Cooper stated source was textile industry, particularly in England. He considered 5000 fibers per liter as high, 1000 per liter as reasonably safe, 100 per liter as virtually undetectable.

(PAGE 1280) Mr. Robert Chaney, California Zonolite Company, appeared for Mr. Pickthall (who could not appear due to a personal emergency). He stated that the company is committed to complete elimination of asbestos from its product "Monokote". Thus the Board's consideration should be considered only as an interim measure pending elimination of asbestos from fireproofing. He said that in San Francisco conditions are far better controlled than in New York. Tabershaw-Cooper was engaged to gather needed data.

SIDE 2
(TAPE 000) Mr. Chaney summarized by citing steps his company is taking to achieve safety in application of fireproofing material.

Dr. Dritz cited measurements at Wells Fargo Building during spraying operations (this report is contained in asbestos file furnished Board previously).

Measurements at other sites were noted, and are available from the State Division of Industrial Safety.

Dr. Dritz cited 2.0 million per cubic foot as threshold limit and peak acceptable as 5.0 million per cubic foot.

(TAPE 020) Dr. Cooper pointed out difficulty of distinction between particle counts and asbestos fiber counts. Smallest particles are probably asbestos.

Mr. Fowler submitted July 17, 1970 report of Tabershaw-Cooper Associates, "Preliminary Examination of Air Moving Systems Lined with Cementitious Fireproofing Materials."

(TAPE 060) Mr. Harry S. Gropp, United States Mineral Products Company, stated that measurements are being made at plenums where their products have been used.

Mr. Whittaker, Fireproofing and Acoustical Contractor, stated that this was his first meeting on subject and he objected to stating of any test criteria for control without having been consulted.

Mr. Oliphant pointed out that the Board has made no determination of criteria, only discussion has occurred thus far.

Mr. Goldberg reviewed previous Board considerations of subject to verify that no decisions made.

(TAPE 100) Mr. Oliphant emphasized that this was first time Board was considering the subject with possible expectation that action may occur.

Mr. John Fisher stated that Bechtel has engaged Abbot Hanks to gather data in plenum air.

Mr. Dalton, Abbot Hanks, stated that work has been begun in the gathering of fiber counts, no reports available as yet. He emphasized that he had not been engaged by any fireproofing industry segment but was objectively gathering data at this time.

(TAPE 130) Messrs. Whittaker, Fisher and Goldberg discussed possible numbers of buildings with supply air plenums; conclusion that there were very few such systems.

Mr. Douglas Fowler stated measurements taken at various points in or near plenums are low - no significant differences between the two types of fireproofing material. Oldest system where measurements taken was constructed in 1962. He cited difficulties in correlating measurements where different sampling techniques and different equipment is used. Use of electron microscope in measurement is new.

Mr. Degenkolb pointed out inference that asbestos fibers were only a small portion of total particle count.

Dr. Dritz emphasized that the asbestos fibers were the ones causing this particular hazard.

Mr. Fisher noted problem of aluminum pitting due to use of cementitious products in vicinity.

Mr. Yoslck, United States Gypsum Company, cited discontinuance of use of Firecode Plaster in San Francisco on January 1, 1970.

(TAPE 210) Mr. Oliphant closed the meeting at 9:15 PM.

The Board recommended that the Superintendent prepare an outline of preliminary construction regulations to limit the "public nuisance" as well as the effect on construction workers. That preliminary set of regulations are to be forwarded to all persons at the hearing as well as all others on the asbestos mailing list. A hearing will be held on those preliminary regulations in September at a date to be set at the next regular meeting of the Board on August 10, 1970. No discussion of the regulations other than setting of the date of the next hearing will take place at the August 10 meeting and all persons will be immediately notified of the date of the September meeting.

Alfred Goldberg, Secretary
Board of Examiners

Attachment - Attendance List
Tabershaw-Cooper Associates Report

BOARD OF EXAMINERS
ASBESTOS HAZARDS - SPECIAL MEETING
JULY 21, 1970

ATTENDANCE

NAME	REPRESENTING
Randolph Finn	National Gypsum Company
K. S. Oleson	National Gypsum Company
Marvin Smith	Gypsum Association
Lawrence Emery	United States Gypsum Company
Dennis Yosick	United States Gypsum Company
Bob Walker	United States Gypsum Company
Sam Kirkes	Bay Area Rapid Transit District
James L. Whittaker	James L. Whittaker
Leonard M. Michaels	United States Mineral Products Company
Harry S. Gropp	United States Mineral Products Company
Robert D. Dalton, Jr.	Abbot A. Hanks, Testing Labs.
Rudy Meiswinkel	Fred Meiswinkel, Inc.
John S. Sheahan	Kaiser Gypsum Company
Robert F. Chaney	Zonolite - W. R. Grace Company
Thomas F. Egan	Zonolite - W. R. Grace Company
Milson Beveridge	W. R. Grace Company
William E. Fitch	Owens Corning Fiberglas Corp.
Thomas C. Campbell	Owens Corning Fiberglas Corp.
Richard Persoff	Hartford Insurance Group
Douglas P. Fowler	University of California
W. Clark Cooper, M.D.	University of California
John Fisher, A.I.A.	Skidmore-Owings and Merrill
Dr. Selma Dritz	Department of Public Health San Francisco