

Environmental Control Department
Research & Engineering Center
January 12, 1970

C O N F I D E N T I A L

**PLAINTIFF'S
EXHIBIT**

SMF-153

H. M. Ball - GHQ
F. L. Pundsack
F. J. Solon, Jr. - GHQ
W. L. VanDerbeek
H. M. Jackson - DHQ
W. P. Raines - GHQ

Sprayed Fireproofing Insulation Meeting
Building Trades Employers Association

Attached is a Memorandum detailing the pertinent comments made by people in attendance at this meeting.

The purpose of the meeting was to review ways in which the potential health hazard to the construction trades and the general public, generated by the use of asbestos-containing spray insulations, could be reduced or eliminated.


E. M. Fenner

EMF/ems

Attach.

cc: File
C

Environmental Control Department
Research & Engineering Center
January 12, 1970

CONFIDENTIAL MEMORANDUM

SPRAYED FIREPROOFING INSULATION MEETING
BUILDING TRADES EMPLOYERS ASSOCIATION

On Friday, January 9, 1970, at 10:00 A.M. a meeting was held at the Building Trades Employers Association headquarters on the 20th Floor of 711 Third Ave., New York City. A list of those in attendance is shown on Attachment "A". The meeting was chaired by I. J. Selikoff, M.D.

The purpose of this memorandum is to transmit to the addressees pertinent comments that were made by different people.

Selikoff

Selikoff opened the meeting by briefly reviewing asbestos and health problems.

He stated that many of his comments concerning the health hazards applied to fibrous glass and mineral wool as well as asbestos. He condemned the use of any product containing fibrous materials such as fiber glass, mineral wool or asbestos, when the product surface was in contact with a moving air stream used for building air conditioning.

He said that asbestos, when inhaled in large quantities over significant periods of time, presents a serious health risk, and that if you have lived one-half mile or so from an asbestos using plant, there is a significant chance that you might develop mesothelioma. Therefore, it is important that we have the airborne asbestos fiber concentration as near zero as possible to eliminate these risks.

Levine

Mr. Levine was introduced by Dr. Selikoff as the President of the Sprayed Mineral Fiber Manufacturers Association.

He listed the steps that the manufacturers are taking to eliminate risk to passers-by and to construction workers.

- (1) Proper preparation of materials, including the addition of a dust suppressant.
- (2) Improved application guns which completely encapsulate the material in water.
- (3) Instructions in proper application techniques.
- (4) Enclosing the entire work area with tarpaulin or other suitable curtains. In order that such enclosures are completely effective, it may be necessary to eliminate spraying of the outer columns and spandrel beams, and encase them in concrete instead as each floor is poured.

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- (5) Schedule work in building so a properly protected applicator and perhaps his helper, are the only people present during spraying.

The Sprayed Mineral Fiber Manufacturers Association is preparing an application manual that will detail proper work practices, including housekeeping.

Selikoff

The National Air Pollution Control Administration must establish by 1972 criteria for asbestos air pollution and by 1975 applicable control standards. Dr. Selikoff's present opinion is that the occupational level will be set at between 2 to 6 F/cc (he is strongly in favor of 2 F/cc or less) and that the ambient air criteria will be 1 fiber per 100 cc (0.01 F/cc).

Rosen

Skidmore, Owens and Merrill are now changing their architectural specification writing to eliminate potential hazard from asbestos containing materials to the applicators or building occupants.

Shapiro

He recommends that laws be passed banning the use of asbestos fiber in sprayed fireproofing.

Novak

Novak made a long speech on the hazards to which asbestos workers have been and are being exposed. He claims not enough is being done to protect the health of his Union members.

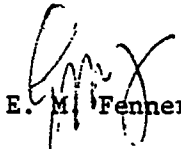
Gropp

Mr. Gropp stated there is an urgent need for governmental standards for control of the industry. When such standards have been set, means must be provided to police construction jobs to assure that they are being met.

General Comments

The meeting now resorted to a general give and take discussion which was terminated by Dr. Selikoff asking the general contractors' representatives, who up until this point had said very little, and Herbert Levine, what the next step was to be.

It was finally decided that Levine would set up a meeting with the General Contractors Association to review his industry's manual of application practices and determine how these practices could be implemented.


E. M. Fenner

Sprayed Insulation Meeting

Friday, January 10, 1970. 10:00 A.M.
711 3rd Ave. bet. 44th & 45 St., 20 Flr.

Re: Sprayed Insulation

1. American Iron & Steel Institute..... J. C. Spence,
633 3rd Avenue, NYC ✓ Chief, Fire Protection Engineer
2. Building Trades Employers Assoc..... *ROBERT ANDERSON*
711 3rd Avenue, NYC ✓ Earl Fullilove, 697-2860
~~Executive Secretary~~
3. Contracting Plasterer's Assoc..... Louis DiBono, 516-HN 6-0100
President
Mario DiBono 732-5222
Plastering Co. Inc.
Great Neck or 136 Liberty St.
4. Diesel Construction..... *W. H. G. CHAGEN*
1133 Avenue of the Americas, NYC ✓ Carl Morse, 581-0300
~~Chairman of Board~~
5. George A. Fuller Co., Inc..... Jim Taylor, Jr. 355-2700
595 Madison Avenue, NYC Vice President
6. Gypsum Associates..... David E. Brackett, 312-726-5675
201 North Well Street, Chicago, Ill. Sec. of Building Code Committee
7. Investing Builders & Owners Assoc..... ✓ Louis Whiteman, OR 9-6555
420 Lexington Avenue, NYC President
- 8a. Johns-Manville Corporation..... ✓ Bill Raines, OX 7-5600
150 E. 42nd Street, NYC Public Relations
- b. J-M Environmental Control..... ✓ Edmund Fenner, 201-722-9000
Manville, New Jersey Director, Environmental Control
9. Local 12. Asbestos Workers..... ✓ Jack Novak, 477-6760
799 Broadway, NYC International Pres., IAHFIAW
10. Local 60. Plasterers Local..... Mr. Lojocarno, 982-8888
80 E. 11 President

✓ = PRESENT

11. Metropolitan Spray..... Stanley Fonfa, NI 5-2506
Brooklyn, New York Vice President
12. Morrell-Brown..... Mel Praeger, 873-4014
15 East 54th Street, NYC President
13. NY Assoc. of Consulting Engineers..... *✓* *GERALD KATZ*
630 3rd Avenue, NYC Elliott Feiden, 697-9418
V.P. of Structural Engineers
14. Emery Roth and Co..... Julian Roth, 753-1733
400 Park Avenue, NYC Administrator
15. James Ruderman..... *✓* Murray Shapiro, 758-6065
515 Madison Avenue, NYC Partner
16. Skidmore Owings & Merrill..... *✓* Harold Rosen, PE 9-2121
400 Park Avenue, NYC Specifications
17. Sprayed Mineral Fiber Assoc..... *✓* Herbert Levine, BA 7-3539
212 DI 9-4390 President
✓ Rudy Toth, WO 4-5265
Philip Carey Corp.
Linden, N.J.
✓ Lee Jenne, 421-7122
Keene Corp.
345 Park Avenue, NYC
✓ Harry Gropp, DI 9-4390, NYC#
U.S. Mineral Products
Furnace, Stanhope, N.J.
18. Tishman Construction Corp..... *✓* *EDWARD RIGAN*
75 Fulton Street, NYC ~~Joseph Newman~~, JU 2-6700
V.P., Tishman Research
19. Turner Construction..... C.C. Powell, 573-0400
150 E. 42nd Street, NYC Senior Vice President
20. Uris Brothers..... *✓* Represented by Mr. Louis Whiteman,
850 3rd Avenue Investing Builders
688-8200

✓ = PRESENT

21. Environmental Sciences Laboratory.....✓ Irving J. Selikoff, M.D.
Mount Sinai School of Medicine Director, Ext. 6106
5th Ave. & 100 St., NYC
TR 6-1000

✓ Harry Heimann, M.D.
Occupational Health. Ext. 6102

✓ William Nicholson, Ph.D.
Industrial Hygiene, Ext. 204

✓ William Reitze, B.S.
Industrial Hygiene, Ext. 204

Duncan A. Holaday, M.S.
Industrial Hygiene, Ext. 204

SPRAYED INSULATION MEETING - 1/9/70

BUILDING TRADES EMPLOYERS ASSOCIATION - 711 Third Ave., NYC

DR. SELIKOFF

NAPCA will set criteria by 1972 for ambient air.

" will set control standards by 1975.

" probably will be two fibers per cc or less for asbestosis.

General public will not be allowed to breathe as much as much as do workers in the factories.

SHAPIRO (Consulting Engineer)

Challenged Dr. Selikoff on any risk to passersby.

Answer is simple -- ban asbestos ... by law.

There are other routes and materials and design techniques that will obviate need for asbestos spraying.

LEVINE & GROPP

Their independent laboratories have show that asbestos is not dislodged from return air plenums.

GROPP

SMFMA had meeting in Philadelphia, yesterday, with Department of Health.

FONFA, GROPP, ETC-

Each spray manufacturer is working on the problem but they have no intention of sharing one company's "secrets" with another.

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DR. SELIKOFF

Dr. Holmes and others in U.K. have shown that air circulating through finished buildings that have sprayed air plenums contains some fiber (about 1/10 the amount allowed in factories). Dr. Selikoff has no information as to whether this amount does or does not present a risk to occupants.

FONFA

Turner Bros. has refused to have Girard Trust Building ^(Philadelphia) sprayed (re air plenums) - re risk to occupants after the spraying.

LEVINE

Plenums can be (spray?) lined with asbestos in a manner that will permit no fiber to get into the air. Would involve coating -- not too expensive.

SHAPIRO

Buildings have only been sprayed in NYC to any significant degree since about 1956 (previously they used mostly cement casing).

Economics! Some spraying goes back 40 years, though.

JENNE

A spray job to GSA standards costs twice ^{what} a NYC office building spray job does.

ROSEN (Skidmore Owens)

Our firm will not design any more buildings to be sprayed! The article in the "NEW YORKER" alerted us!

OBSERVATIONS

Dr. Selikoff and Levine and Gropp in real battle over the facts -- the hazard.

Spray people think the whole thing is exaggerated and are inconvenienced.

Dr. Selikoff berated spray people for lack of progress and interest.

Spray people told him that they are working (individually) on it but no single company will share its "secrets" with the others.

Skidmore Owens has the "broad view" of the problem.

Spray people want some agency to agree to enforce any standards (obviously to keep all the "boys honest").

#

W. P. Raines
1/12/70

DRAFT

ASBESTOS SPRAYING REGULATIONS

1. Before the application of asbestos-containing material commences, the floor of the area involved shall be cleared of all objects, material and equipment, other than that employed in the application of the insulation or should be covered in a manner that precludes the subsequent dispersal of asbestos particulates.
2. The entire floor or the part of the floor to be insulated shall be enclosed in a manner which shall preclude the escape of insulating material from the enclosure. All interior open areas, such as elevator shafts, stairwells, etc., shall be enclosed in a manner which shall prevent escape of insulating material from the working area. "Stack effect" of the shafts, stairwells; etc., shall be considered in providing proper enclosures.
3. Wet asbestos-containing insulation which has fallen to the floor shall be immediately swept up and placed in a container having walls, bottom, and a tight cover strong enough to resist tearing or breaking under normal handling conditions. The contents of the aforementioned containers shall not be transferred to another container, but the container shall be placed directly upon a vehicle for disposal at an approved site.
4. All floors will be vacuumed immediately after drying. The vacuum cleaner shall contain a strong, single-service, disposable inner bag of durable material which shall be removed from the vacuum cleaner and tightly sealed. The bag shall then be placed in a container which shall thereafter be placed on a vehicle for removal and disposal at an approved site.
5. a) The materials used to form the enclosure shall be thoroughly vacuumed upon completion of the application of the insulation in the area. The entire floor area, all ledges and surfaces upon which waste insulation material may have fallen, shall then be vacuumed or revacuumed before removal of the enclosures.
- b) Enclosures shall not be dismantled until the area has been vacuumed after 24 hours have elapsed since completion of spraying and clean-up.
- c) An enclosure will be considered satisfactory only if visible insulating material cannot escape from the enclosure.
- d) All areas used for opening of bags containing insulation material and/or charging of hoppers shall be enclosed in such a manner that insulating material cannot escape from the immediate area in which such activity takes place.

Signs shall be posted outside enclosures warning persons of the hazard of entering the enclosure without appropriate mask and other apparel.

17) All persons involved in the spraying of asbestos at the site must be furnished with face masks constructed in a fashion which precludes the inhalation of asbestos particulates and must be furnished with suitable coveralls which will be left at the site and thereby preclude the removal of asbestos from the site. No person shall be permitted in an area in which asbestos spraying or handling has taken place within a 12-hour period after completion of the spraying and cleaning referred to in paragraph numbered "5" herein unless such person is furnished with and wears a face mask and coveralls of the type described herein.

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Asbestos Spray Materials / Jimpet