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OFFICIAL REPORT OF PROCEEDINGS

before the

of the

U. S. DEPARTMENT OF LABOR

Docket No.

In the matter of

STANDARD FOR EXPOSURE TO ASBESTOS DUST
PROPOSED RULE MAKING

PUBLIC HEARING

Place: Washington, D.C.

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1 UNITED STATES DEPARTMENT OF LABOR

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3 OCCUPATIONAL SAFETY AND HEALTH
4 ADMINISTRATION HEARINGS ON STANDARD
5 FOR EXPOSURE TO ASBESTOS DUST

6 Conference Room B
7 Department of Labor
8 Washington, D. C.

9 Monday, March 15, 1972

10 The hearing on occupational safety and health
11 standards for exposure to asbestos dust reconvened at
12 9:00 a.m., Arthur H. Goldberg, presiding.
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(The document above referred to was marked as Exhibit No. 38 for identification.)

EXAMINER GOLDBERG: All right.

MR. FAY: And the second one is the Asbestos Fact Sheet concerning the uses of asbestos and asbestos products.

EXAMINER GOLDBERG: That will be Exhibit 39.

(The document above referred to was marked as Exhibit No. 39 for identification.)

EXAMINER GOLDBERG: Thank you.

Exhibits 38 and 39 are received.

(The documents previously identified as Exhibits Nos. 38 and 39 were received in evidence.)

EXAMINER GOLDBERG: Introduce yourself.

MR. SWETONIC: My name is Matthew M. Swetonic, and I am Executive Secretary of the Asbestos Information Association of North America and also manager of special projects in the Public Affairs Section for the Johns-Manville Corporation.

Mr. Fay has already described the association, and identified the companies which it represents. We are basically an information disseminating organization and the facts or opinions contained in my presentation are supported in the

9

1 medical literature or constitute the professional opinion of
2 medical and technical experts available to the industry as
3 consultants.

4 The asbestos industry has recognized for many years
5 that there are occupational health hazards associated with
6 the excessive inhalation of asbestos dust. Recognizing its
7 obligation to protect its workers, the industry has over the
8 years invested many millions of dollars in sophisticated and
9 highly efficient equipment to reduce asbestos dust levels in
10 the work places generally accepted safe limits. Some \$100
11 million has been invested for this purpose in the past decade
12 alone. I just might point out in reference to some of the
13 testimony that was given this morning that almost exclusively
14 this equipment was designed to prevent exposure at the source,
15 dust collection equipment of the type that was described for you
16 in the insulation trade but on a much, much larger scale --
17 again not protecting the worker, but protecting him from the
18 dust before it ever gets to him.

19 The general position within the industry is that we
20 would never like to see a man ever have to wear a respirator,
21 for example. The source is the place to stop exposure.

22 Over the years, acceptable safe limits for asbestos
23 exposure has been lowered a number of times by various bodies,
24 including NCGIH and others. The industry has worked hard to

1 is being faced with the possibility of yet another decrease
2 in the acceptable limits for asbestos exposure. In the past,
3 each new standard was accepted by the industry because the
4 developing medical evidence indicated that new lower limits
5 might indeed be necessary. This is certainly not the case
6 with the two-fiber standard proposed by the National Institute
7 of Occupational Safety and Health. The medical brief pre-
8 pared by NIOSH in support of the two-fiber limit, in our
9 opinion, falls far short of establishing the necessity of such
10 a standard.

11 The criteria document, in fact, states quite
12 clearly on page D-10 that "the number of studies that have
13 collected both environmental and medical data and with a
14 significant number of exposed workers is not sufficient to
15 establish a meaningful standard based upon firm scientific
16 data."

17 If this is true, then the question must be asked:
18 upon what data shall a standard be based? If we are going to
19 base our standard upon what others have done, which is the
20 basic approach that NIOSH had taken, then we are running
21 around in circles, because if specific data is not available
22 to us today, then it could not possibly have been available
23 to others when they developed their standards in the past.

24 The simple truth is that no one, NIOSH included,
25 knows for sure what a safe occupational standard should be.

1 There is general agreement among the professionals studying the
2 problem that it should probably be lower than 12 fibers per
3 cc, but how much lower is a question that has not been
4 answered to everyone's satisfaction. The main reason for this
5 is that the disease we are seeing today is the result of
6 conditions that existed 20 or 30 or 40 years ago, at a time
7 when today's highly sophisticated dust collection equipment
8 was not readily available and when both the industry and the
9 medical profession knew relatively little about the hazards
10 of asbestos dust.

11 This point has been made repeatedly by the doctors
12 testifying before this hearing.

13 We simply do not know for sure what the dust levels
14 were in those days, but there is every indication that they
15 were enormously higher than they are today. For this reason,
16 as many doctors have pointed out, we must be very careful
17 about looking at today's conditions and today's disease and
18 trying to draw a parallel between the two. Such a parallel
19 does not exist, and this can lead to some very erroneous
20 conclusions.

21 Let me give you an example.

22 It has been reported by some researchers studying
23 the insulation trades in this country that the dust con-
24 ditions that exist today on insulation job sites and in ship-

1 led to a calculation that the very high death rate found
2 among these men is directly attributable to levels of around
3 three fibers per cc. The evidence is substantial that this
4 calculation is inaccurate.

5 I am submitting with my testimony a paper which
6 describes the decreasing asbestos content of insulations used
7 in the trades over the past 30 to 40 years. You will recall
8 that this basic question about the levels of exposure in the
9 past among these people was brought up yesterday by
10 Dr. Nicholson and under question by Mr. Sheckler. The basic
11 document which substantiates the conclusion that the levels
12 are considerably different, although we don't know what they
13 were 40 years ago, but we do know they were much higher, is
14 contained in this paper which I have here entitled, "Changing
15 Concepts of Insulation Material."

16 I will not go into the details of what is contained
17 in this paper, except to submit it.

18 For example, I submit this paper not to discredit
19 any researcher's work. Obviously, I am not in a position to
20 do that, but merely to point out as others have done, the
21 enormous difficulty one encounters in trying to establish
22 meaningful numerical standards.

23 In addition, as Dr. Holmes pointed out in his
24 testimony, the evidence seems to indicate that more importance
25 should be given to peak exposures in evaluating disease

1 potential than to time weighted averages.

2 For example, in the tearout of old insulations
3 aboard ship, the British have counted levels as high as
4 3800 fibers per cc, with a mean ranging between 159 fibers
5 per cc and 353 fibers per cc. Today, of course, men performing
6 this work are protected by air supply respirators. Thirty
7 years ago, when they received exposures that led to their
8 present disease, they were not so protected.

9 The doctors are generally agreed that the lung's
10 ability to cleanse itself of accumulated dust would be
11 seriously reduced at such high levels, yet a time-weighted
12 average for a 40-hour week might show a relatively low level.

13 In the spraying industry, counts as high as 1500
14 fibers per cc have been recorded. Yet, considering the time
15 spent on preparation of the equipment and other non-spraying
16 tasks, the time-weighted average for these workers might come
17 out to be reasonably moderate.

18 Thus, in the opinion of most experts, time-weighted
19 averages can be very misleading if the men are periodically
20 exposed to fiber levels so high that the lung's cleansing
21 mechanism fails considerably in its ability to rid the lung
22 of accumulated fiber. If, as the experts have told us, the
23 lungs can remove 99% of all inhaled particles, including
24 asbestos fiber, then a reduction in the cleansing function of
25 even a few percent will increase the amount of fiber retained

1 by that many magnitude.

2 In addition to these reasons, there are excellent
3 technological and economic reasons for not promulgating too
4 strict a time-weighted average, and instead placing more
5 attention on eliminating the high peak exposures. The industr
6 is in the process of trying to develop accurate data with re-
7 gard to economic impact.

8 Mr. Fay referred to this in his presentation.

9 We are working hard on this problem with OSHA,
10 Bureau of Standards, and with Arthur D. Little. While it
11 will be some weeks before final figures will be available,
12 early estimates indicate that the cost to the industry of
13 meeting a two-fiber standard, in those sections of the industry
14 where such a standard is feasible, would be in the vicinity
15 of \$200 million.

16 In recommending a standard of two fibers per cc,
17 the erroneous assumption has been made that today's tech-
18 nology is capable of lowering the levels in each and every
19 asbestos operation to two fibers. Past experience would
20 indicate that in a sizable number of operations it will be
21 impossible to reduce the levels to two fibers, no matter how
22 much money is spent.

23 In these cases, the operations obviously would have
24 to be shut down and the men thrown out of work. We have only
25 a very rough idea at this time how large a segment of the

1 manufacturing industry would be affected in this manner, but
2 an estimate of perhaps 15 to 20% seems reasonable.

3 Applied to the sales of a billion dollars, this
4 would obviously work out in the range of \$150 to \$200 million.

5 In addition, there will no doubt be cases where the
6 technology is available to reduce levels to two fibers, but
7 where the cost involved would make a particular product line
8 either no longer profitable or no longer competitive on the
9 open market against non-asbestos containing products of the
10 same type.

11 In these cases, the plant or manufacturing operation
12 would also be shut down. This particular type of situation
13 would also exist at a five-fiber level hopefully in not as
14 many cases.

15 Trying to put a handle on the potential number of
16 lost jobs is extremely difficult. Many small manufacturing
17 operations will undoubtedly go under, but it is nearly
18 impossible to determine the total number of men we are
19 talking about. Perhaps 15 to 30 thousand is about as close
20 as we can come at this time. This would not be just in
21 manufacturing but would be a consideration of the insulation
22 trades and other groups as well.

23 The figures I have just mentioned may not seem large
24 when compared to what the steel or automobile industries would
25 have to pay in similar circumstances, but the asbestos industry

1 in this country is much smaller, and \$200 million in equip-
2 ment, another \$200 million or more in eliminating product lines
3 due to an inability to meet the two-fiber standard, and 20
4 or 25 thousand lost jobs is an enormous chunk of this industry.
5 For this reason, it is vital that OSHA give considerable
6 thought before promulgating a standard that even the experts
7 agree is not based on solid scientific evidence.

8 Of additional enormous potential financial impact on
9 the industry is the labeling requirement as contained in the
10 final recommendations of the OSHA Advisory Committee. It
11 would require the placing of a warning label on each and every
12 product containing more than 5% asbestos by weight. This
13 label which contains the words: "Do not breath dust -- may
14 cause asbestosis and cancer."

15 Such a label would surely spell the demise of a
16 number of major product lines of the industry, including vinyl-
17 asbestos floor tile, asbestos-pipe, and any other product
18 that is sold directly to the consumer market. In addition,
19 there is no doubt that our competitors will attempt to take
20 advantage of the situation by encouraging the public to avoid
21 asbestos-containing products because of the potential health
22 hazards implied in the warning label, even though to the
23 customer no such hazard exists.

24 I would question whether such a label is, in fact,
25 necessary or called for in the majority of asbestos-containing

1 products. Everyone in the industry and in the medical and
2 scientific profession who has dealt with the asbestos health
3 problem over the years is familiar with the concept of locked-
4 in and non-locked-in products. A locked-in product is one in
5 which the asbestos is bound into the product with cement,
6 asphalt, plastic or some other binder which prevents the
7 escape of free fiber in use.

8 Examples of locked in products would be asbestos
9 cement products and floor tile. Non-locked-in products would
10 be those in which the fiber is loosely bound and which release
11 fiber during handling or application. Most asbestos-containing
12 insulations would fall into this category, as would fire-
13 proofing sprays and insulating cements.

14 I should mention that while there is no labeling
15 requirement under any Federal statute for insulation products
16 at the present time, I believe the majority of the companies
17 in the industry voluntarily have a warning label on most
18 insulations which they consider potentially hazardous in use.
19 The same applies to a lot of bag asbestos cement products and
20 fiber shipments. This was a voluntary action on the part of
21 many of the companies in the industry.

22 The fact of the matter is that the percent of
23 content of fiber in a product has absolutely nothing to do with
24 its ability to create a health problem. An insulation con-
25 taining 7% asbestos fiber requires very careful handling,

1 while an asbestos cement sheet with 15% asbestos requires
2 essentially none.

3 For this reason, it is only logical that the
4 Advisory Committee recommended labeling system be discarded
5 in favor of a system which only requires labeling on those
6 products which readily release asbestos fiber in a hazardous
7 quantity during handling or application.

8 With regard to the monitoring requirements of the
9 proposed regulations, I would only like to point out that
10 there are probably no more than three dozen trained industrial
11 hygienists in the entire country available to industry to
12 sample and analyze asbestos dust concentrations. OSHA should
13 appreciate this problem because of its own difficulties in
14 finding qualified industrial hygienists. Men can be trained
15 to do this job, but it is going to take much more time than
16 is permitted under the law.

17 I might also point out that the dust monitoring
18 system as required in the regulations will cost the manu-
19 facturing industry alone between \$3 and \$5 million per year,
20 not an exorbitant sum when viewed by itself, but one that
21 adds to an already heavy financial burden on the industry.

22 As my final point, I would like to discuss for a
23 minute the medical aspects of the Advisory Committee recom-
24 mendations. The recommendations state that the medical
25 surveillance program shall be carried out by physicians

1 selected by the employee, and that the medical records will
2 be available only to HEW and DOL physicians and "medical
3 consultants and physicians designated and authorized by the
4 employee."

5 You will note this employer is by omission pro-
6 hibited from seeing an employee's medical record, even though
7 the employer is responsible under the law for the medical
8 condition of his employees.

9 Under Section (c) (7) of the Advisory Committee
10 recommendations, an employer is required to make sure that
11 no employee "should be assigned to tasks requiring use of
12 respirators if his most recent medical examination indicates"
13 and then the section goes on to the certain medical criteria.

14 How can an employer obey the section of the
15 regulations if he is prohibited from seeing an employee's
16 medical records by another section of the regulation? This
17 is completely illogical and is obviously reflective of the
18 haste with which the advisory committee was required to
19 perform its duty.

20 In addition, how could an employer conduct a pre-
21 ventive medicine program in his plant if he cannot perform
22 examinations, note changes in medical conditions, and counsel
23 employees? These programs are in existence in essentially
24 all manufacturing companies in the asbestos industry. And I
25 might point out that not only are employees counseled on

1 possible occupational health problems, but on the general
2 overall health condition as well.

3 We have heard the arguments from certain unions,
4 not necessarily here, but from others, that it should be solely
5 up to the employee to decide whether or not he is willing to
6 work under the existing conditions, whatever they may be.
7 This simply does not make good sense, because it is still the
8 responsibility of the employer to safeguard the health of
9 his employees. Where the responsibility lies is where the
10 implementation of the medical surveillance program should be
11 centered, and no place else.

12 It should also be pointed out that a system of the
13 type proposed in the recommendations would effectively present
14 future etidemiological studies of the asbestos industry,
15 except on a very limited or local scale. The medical records
16 vital to such studies would be distributed among thousands of
17 doctors all across the country, and retrieval would be virtu-
18 ally impossible.

19 In conclusion, I would like to summarize very briefly
20 the various points I have attempted to bring out in my pre-
21 sentation.

22 One. The medical evidence for establishing a
23 meaningful time-weighted average is unavailable at this time.

24 Two. Most experts agree that the brief, massive
25 doses of asbestos fiber are probably more important in the

1 causation of the disease than continuing, long-term, low or
2 moderate exposure. This is not to preclude that low exposure
3 over an enormous period of time are not to be considered at
4 all, but that the one is more important than the other.

5 Three. If OSHA promulgates a time-weighted average
6 lower than five, the economic impact on the industry will be
7 enormous. In addition, many asbestos-containing products will
8 probably disappear from the marketplace and thousands of jobs
9 will be eliminated.

10 Four. A labeling requirement of the type recommended
11 by the OSHA Advisory Committee will result in the unnecessary
12 loss of hundreds of millions of dollars in sales each year.
13 Entire segments of the industry will be destroyed, with
14 resultant large-scale unemployment.

15 Five. The dust monitoring program recommended by
16 OSHA is impractical at this time because of the lack of
17 trained personnel.

18 Six. The medical surveillance recommendation of
19 the Advisory Committee is illogical and unworkable.

20 There are, of course, other sections of the proposed
21 regulations that will create difficulties in addition to those
22 that I have discussed and these will be mentioned by separate
23 testifiers. However, I believe that the points that I have
24 covered are the most important, at least to the manufacturing
25 side of the industry.

8157

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DL-1-1-76
MAY 1965

U.S. DEPARTMENT OF LABOR

Washington

PLAINTIFF'S
EXHIBIT

AIA-13

RECORDS AUTHENTICATION CERTIFICATE

I HEREBY ATTEST, That the annexed copy, or each of the specified number of copies, of each document listed below is a true copy of a document in the official custody of the Department of Labor.

1 copy each of:

Transcripts from March 14, 15, 16, and 17

Comments and hearing exhibits of:

W.J. Nicholson, American Petroleum Institute, D.A. Holaday, Brand Insulation Inc., L.J. Bibri, B.J. Phillips (Certain-teed), M.W. Borow, J.D. Moran (Flint-kote), F.L. Pundsack (J-M), J.W. Rawlings, W.M. Hancock (Dow), W.K. Hesse (J-M), E.M. Fenner (J-M), E.J. Killian (Nat. Cypsum), Cement Asbestos Products Co., M.M. Key, G.E. Best (MCA)

SIGNATURE AND OFFICIAL TITLE	DIVISION AND BUREAU	DATE
<i>Daniel J. Marsick</i> Daniel J. Marsick Technical Information Specialist	Docket Office/Technical Data Center/Occup. Sfty & Hlth Adm/ U.S. Dept. of Labor	7 Sep 78

I HEREBY CERTIFY, That Daniel J. Marsick who signed the foregoing attestation, is now and was at the time of signing (title) Technical Information Specialist and has legal custody of the official records of the United States Department of Labor therein attested and that full faith and credit should be given to his act as such.

IN WITNESS WHEREOF, I

J. J. Lafranchise

duly designated by the Secretary of Labor as Authentication Officer of the Department of Labor, have hereto subscribed my name and caused the seal of the Department of Labor to be affixed this 7th day of September, 19 78.

J. J. Lafranchise
Authentication Officer
Department of Labor



UNITED STATES DEPARTMENT OF LABOR

WASHINGTON, D.C.

- - - - -X
In the Matter of: :
STANDARD FOR EXPOSURE TO ASBESTOS DUST, : PUBLIC HEARING
PROPOSED RULE MAKING :
- - - - -X

Conference Room B
Interdepartmental Auditorium
12th & Constitution Ave.,
Washington, D.C.
Thursday, March 16, 1972

The above-entitled matter came on for further hearing
pursuant to recess, at 9:00 o'clock, a.m., Thursday, March 1:
1972.

BEFORE:

ARTHUR M. GOLDBERG, Hearing Examiner

APPEARANCES:

(As heretofore noted.)

AFTERNOON SESSION

(2:00 p.m.)

EXAMINER GOLDBERG: On the record.

Mr. Fay and Mr. Swetonic -- excuse me, is
Doctor Tetrick in the room?

All right, Mr. Fay and Mr. Swetonic.

MR. FAY: My name is Albert H. Fay. I am Vice
President of the Gold Bond Building Products Division of the
National Gypsum Company in Buffalo, New York. I am appearing
here today in my capacity as president of the Asbestos
Information Association of North America, located in New York
City. The Asbestos Information Association is comprised of
twelve of the nation's largest miners, manufacturers and
importers of asbestos and asbestos-containing products. The
member companies of the association are listed on a fact
sheet, which I will submit with my testimony.

As an introduction to industry testimony that will
follow, I would like to briefly sketch for you a general
picture of the size and scope of the asbestos industry in the
United States, the types of products produced, the number of
people employed, and other factors that will help position the
asbestos manufacturing industry in the economic and social
structure of this country:

I should mention before proceeding that the

manufacturing side of the industry, and does not include detailed information on industry using finished asbestos products, such as the construction industry or the insulating application and removal trades.

Asbestos is the generic name given to a group of inorganic hydrated silicate minerals that have one common attribute, namely, the ability to be separated into relative soft, silky fibers. The three most commonly used varieties of asbestos are chrysotile, crocidolite, or blue fiber and amosite.

It is important to note that chrysotile accounts for more than 98% of the total annual United States consumption of asbestos. In the past, crocidolite and amosite were used far more extensively in the United States than they are today. The leading producers of chrysotile fiber are Canada and the Soviet Union, with smaller deposits being found in South Africa, Rhodesia, China, the United States and Italy.

Crocidolite and amosite are mined almost exclusively in South Africa.

The total annual world production of asbestos is around 4 million tons, with Canadian production accounting for about 30% of the total, and the United States about 3%.

The properties of asbestos that give it commercial value are its fibrous structure, the great tensile strength of the fibers and its resistance to high temperatures and to

1 judge the total economic value of the asbestos industry to
2 the nation. We firmly believe, however, that the Arthur D.
3 Little Company economic study now under way, will show it to
4 be substantial. For example, it has been estimated that the
5 insulation trades alone involve 40,000 men who spend at least
6 a quarter of their time working with asbestos-containing
7 products. Other employees whose livelihood depends at least
8 to some extent on the use of asbestos-containing products
9 include other types of construction workers; siding, roofing
10 and tile installers, pipe layers, salesmen, distributors and
11 dealers in asbestos products. It is impossible to calculate
12 the total income derived by these workers from the use or
13 sale of asbestos-containing products, but it is certainly in
14 the hundreds of millions of dollars.

15 If one adds in the value of services, machinery,
16 raw materials and other commodities purchased by the asbestos
17 manufacturing industry each year for use in the production or
18 shipment of finished asbestos products, the total economic
19 contribution of the industry to the nation's economy would
20 reach, perhaps, \$3 billion, and would involve, to some degree
21 the livelihood of at least half a million wage earners and
22 their families. We believe the economic and social contribu-
23 tion of the asbestos industry to the nation is substantial.

24 In addition to the many and varied lifesaving

1 technological society. For these reasons, the establishment
2 of reasonable and feasible occupational health standards for
3 asbestos is a matter of great importance, not only to the men
4 whose health we are trying to protect, but also to the industry
5 and to the country as a whole.

6
7 Our industry is cooperating fully with the Arthur D.
8 Little Company in the economic study they have been retained
9 to make by OSHA. We are all working hard to develop precise
10 figures as to the potential economic effect of the proposed
11 regulations on our industry. To date, we have been able to
12 make only rough estimates. In general, they show a cost to
13 the industry of approximately \$200 million in new equipment
14 to comply with the proposed standard of two fibers per cubic
15 centimeter in those sections of the industry where we believe
16 a two-fiber standard is technologically feasible. The
17 proposed regulations would also produce a loss in sales of
18 at least \$400 million because of the labeling requirements
19 and the shut down of operations where two fibers is technologically
20 unfeasible. A number of companies have already
21 indicated that they do not believe a two-fiber standard is
22 feasible in many operations, and that if such a standard is
23 promulgated, they will close down those operations immediately
24 rather than spend billions of dollars in a vain attempt to
25 achieve the unachievable. The loss of jobs will be substantial.