

MINUTES OF THE MEETING

of the

ASBESTOS STUDY COMMITTEE

Friday, June 14, 1974, at 9:45 A.M.

Institute Office, E. 210 Route 4, Paramus, N.J.

UNCONFIRMED
MINUTES

FAI-7
8/23/82

PLAINTIFF'S EXHIBIT

MAR-100

MEMBERS PRESENT

I. H. Weaver, Chairman
H. Wagner
M. Jacko
D. E. Stone

Raybestos-Manhattan, Inc.
Carlisle Corporation
Bendix Corporation
Bendix Corporation

FOR THE INSTITUTE

E. W. Drislane

Friction Materials Standards Institute, Inc.

MEMBERS NOT PRESENT

J. Dunderdale
E. H. Feierabend

World Bestos Company
Abex Corporation

The meeting was called to order by Mr. Weaver, Chairman, at 9:45 A.M.

MINUTES OF PREVIOUS MEETING

The Secretary read a summary of the Minutes of the Meeting held June 1, 1973. These minutes had been released and a motion for their acceptance had been obtained.

Upon motion duly made, seconded and unanimously passed, it was

RESOLVED: To accept the minutes of the June 1, 1973 meeting as distributed.

COMMITTEE MEMBERS

There have been changes in the Committee make-up since the last meeting. Mr. Tom Bell of Thermoid has retired. Mr. J. C. Henning of World Bestos has been replaced on the Committee by Mr. J. Dunderdale of World Bestos. Mr. D. E. Stone of Bendix has been invited to serve on the Committee.

The Committee make-up as of July 1, 1974 will be:

I. H. Weaver, Chairman
M. Jacko
D. E. Stone
E. Feierabend
H. Wagner
J. Dunderdale

Raybestos-Manhattan
Bendix Corporation
Bendix Corporation
Abex Corporation
Carlisle Corporation
World Bestos Company

MAR

000090

NATIONAL EMISSIONS STANDARDS FOR ASBESTOS

On May 3, 1974 the Federal Register published clarifying revisions to the EPA National Emissions Standards for asbestos. They exempted "fabricating" which would cover the rebuilding or the re-manufacturing of brake shoe assemblies. The definition of manufacturing was clarified to indicate those sources that process commercial asbestos into a product. It does not consider a manufacturer to be one who cuts, shapes, assembles or otherwise alters a manufactured product that contains asbestos. This would leave the rebuilding operation outside of the scope of the national emissions standards for asbestos.

In these clarifying revisions they also give the definition of a visible emission. In essence it was stated that the "no visible emissions" requirement does not apply to uncombined water if that is the sole reason for failure. An additional section on these qualifying revisions was that dealing with disposal of asbestos waste products. The agency will determine whether it is necessary to regulate these sources. No specific statement was made concerning waste disposal practices but the agency did indicate that they were going to look into this problem.

Mr. Weaver advised that the EPA is considering steps to improve on the emissions standards and in particular is considering a numerical standard rather than the "no visible emissions" standard. There is no specific report of progress in this area as regards the EPA Emissions Standards.

STATUS OF THE OSHA REGULATIONS

During the year a suit was brought by the AFL-CIO against the Department of Labor concerning the Occupational Safety & Health Act. Their petition was aimed at strengthening (not weakening) OSHA regulations. The U.S. Court of Appeals rejected their petition for review. In essence the OSHA Regulations stand as they were originally presented.

There is consideration of changing the OSHA Regulations to be more work-practice oriented rather than based on numerical standards. Mr. Weaver advised that the Labor Department no longer plans to completely rewrite the standard. Apparently they will try to work in sections on work practices such as housekeeping, warehousing and other areas. There is very little likelihood of any easing in the two fibers/cc standard that is to go into effect in 1976.

There may be additional recommendations concerning practices to be used when introducing the asbestos fibers into the manufacturing process. In addition they are talking of monitoring techniques, medical surveillance and waste disposal.

In response to a question it was stated that a respirator may be used for interim use when one is working towards getting the work place down to the five fibers/cc limit. However, the respirator is not a permanent solution.

MONITORING METHODS FOR SAMPLING ASBESTOS

A question came up concerning the EPA's measurement of asbestos concentrations in place of the "no visible emissions" standard. Mr. Weaver indicated that the EPA would like to get some kind of a measurement that they could rely on.

It was stated that the membrane filter method with the optical microscope still leaves a lot to be desired.

Work is being done on electron microscopy. Problems exist on how to satisfactorily pick up the sample that is to be measured. Dr. Jacko indicated that he had been working with the Nuclepore filter for their study for the EPA concerning asbestos emissions from motor vehicle brake and clutches. (The Millipore filter is used in the OSHA Regulations.)

A paper was shown that had been presented by the Franklin Institute Research Laboratories for EPA. This report was entitled, "Development of an Instrumental Monitoring Method for Measurement of Asbestos Concentrations in or near Sources". This used scanning electron microscopy with microprobe capability. The scanning electron microscope can see the fiber but cannot tell the structure. The microprobe can identify the chemical structure. It might be said that the electron microscope can count while the microprobe can identify. Further work is necessary to automate this counting.

It was stated that the current membrane filter method can be 50% off even with relatively skilled observers. In addition the results vary depending upon which section of the sample is counted. Mention was made of the Millipore MC system for monitoring asbestos. This is essentially an image analyzing method. The same microscope image seen by the operator is utilized but a digital computer performs counting and measuring functions.

Mr. Weaver mentioned that there was instrumentation at a cost of less than \$10,000 which would help in the counting. In particular he mentioned the Coulter attachment on the binocular microscope which projects an image on a TV screen. One can measure length or diameter of the fiber digitally. It is considerably simpler than the measurement of asbestos under a microscope and there is less fatigue involved.

It was mentioned that in the Biospherics project for EPA which checked on pollution of water by motor vehicles optical microscopy was used. Dr. Jacko indicated that he had been in touch with those at Biospherics who had done this work and that he concluded that their results were reasonable.

EXPANDING OF COMMITTEE BEYOND ASBESTOS

The pros and cons of expanding this Committee's activities beyond the asbestos field were discussed. While it was stated that many of the asbestos programs get into other problems such as work practices and plant disposal problems, it was felt that expanding the Committee's activities into the areas of heat stress, noise and safety related problems might be biting off too much. It was stated that there are sufficient problems in asbestos related fields to keep this Committee busy without adding responsibilities. It was suggested that if need were to be shown for a committee to delve into work practices it would be best if a Work Practices Committee were established. The Asbestos Study Committee in the meanwhile will be involved with work practices where they affect control of asbestos in the work place or the environment.

Upon motion duly made, seconded and unanimously passed, it was

RESOLVED: That the Asbestos Study Committee will not expand their activities beyond the field of asbestos.
Any such expansion should take the form of a new committee.

AMERICAN INDUSTRIAL HYGIENE MEETING

There were three papers to be given at this meeting which should have been of interest to the friction materials business. One concerned exposure of turnpike toll booth operators to automotive dust by Diberardinis, Burgess and Lynch. This paper was more concerned with the exposure to carbon monoxide and other gases from the internal combustion engine. This paper was not concerned with asbestos emissions.

Another paper was that concerning observations of two brake lining manufacturing industries by Cowle, Rajhans, and Moore. This paper (for some unknown reason) was scratched from the presentations.

The only paper of direct interest to the friction materials industry was that entitled, "Asbestos Exposure During Brake Lining Maintenance and Repair" by Rohl, Anderson, Nicholson, and Langer. This paper concerned itself with exposure to asbestos during brake relines, primarily in New York city shops. Some of the housekeeping conditions in these shops were deplorable. They are perhaps no worse than in other shops throughout the country. It may be that the brake lining industry can help promote better working conditions for those exposed to asbestos in the field (in the shops that rebuild brake shoes or install and service brakes on vehicles). The use of air hoses for cleaning off brakes is common. Good work practices could be advocated. The dust concentrations during the blowing off of brakes are in excess of the five fibers per cc allowance. There was not sufficient observation using time weighted averages to give complete balance to this paper. The paper was presented in an objective fashion and the question and answer session that followed was also handled objectively. No earth-shaking conclusions were made from this paper. It was obvious, however, that there is a need for better work practices at the re-line and installation level.

ASBESTOS INFORMATION ASSOCIATION (AIA/NA)

In January 1974 Mr. R. H. Mereness of the Asbestos Information Association wrote concerning listing the Friction Materials Standards Institute as an "affiliated association". At that time I indicated to Mr. Mereness that the Institute would be happy to consider itself an "affiliated association". In subsequent correspondence with members of the Board of Directors it was indicated that this was premature. One director indicated that we might be exposing ourselves in an area where we now have a low profile. That is, the friction material manufacturers are not primary offenders like those in the construction field and in textile operations. Affiliation, as such, might move us into the target area. Another objection had to do with the legal status of any so-called affiliation. Mr. Stickles indicated that there might be some objection to our being considered an affiliated organization and we would need more information.

There were several Board members who indicated that we should do whatever we can to support the Asbestos Information Association. In our discussion at the meeting the consensus was that we should reciprocate and support the Asbestos Information Association. However, considering the absentees at the meeting, it was decided not to make any resolution on this subject. It was suggested that this be discussed further at the Board meeting in June.

The Asbestos Study Committee is taking no position as regards being considered an "affiliated association" with the Asbestos Information Association.

UAW STUDY - ASBESTOS WORKERS' PENSION PLANS

There was a brief article in the April 1974 issue of ASBESTOS magazine concerning the UAW's intention to study the occupational hazards to which asbestos workers are exposed with a possibility towards reopening pension plans for these workers. There were no additional specifics concerning the subject in the article.

In discussion it appears that the study is being made at the Chrysler Corporation. Asbestos workers in the UAW are primarily involved with brake lining and clutch facing manufacture. There are some UAW plants working on the Assembly of brake linings or clutch facings which could also be involved. This would be the second area where UAW members might be involved where there are asbestos concentrations in the work place. This would include such brake assemblers as the Bendix group in South Bend, Kelsey Hayes, Chevrolet Gear and Axle, and Wagner Electric.

The most significant asbestos use in the automotive field is in brake lining. Clutch facings are probably close second. However there is asbestos used in air conditioning ducts for some Ford motor company vehicles. This apparently is the only significant use of asbestos other than in friction materials. It would appear therefore that any try for a pension program of "25 years and out" will be aimed at the friction materials business.

PELLETIZING ASBESTOS WASTE PRODUCTS

Mr. Dave Stone of Bendix showed some photographs of a sophisticated pelletizing arrangement for taking asbestos dust products from their dust collectors. The process had been described at an earlier meeting. Essentially a small amount of cement is added and the dust is formed into pellets and dropped from there into a truck for disposal at a land-fill. The pelletizing removes or reduces the problems with dust when a truck is being loaded and when the dust is being disposed of. For Bendix, this operation did reduce the need for a watering operation at the land-fill site. Bendix will use this pelletizing operation at both their Troy, New York, and at their Cleveland, Tennessee plant. The pellets are essentially wet balls when they are dumped at the land-fill. Mr. Stone indicated that if other parties were interested in seeing this pelletizing operation he would make arrangement through members of the Asbestos Study Committee. It is suggested that if individuals would like to see the installation at Troy, New York that they contact a member of the Asbestos Study Committee.

FOAM SPRAY FOR CONTROL OF DUST

Mr. Stone showed an article on the use of a foam spray for controlling dust in coal mines. (ANALYSIS OF FOAMEROL FOAM AND ITS COMPARATIVE EFFICIENCY AS A DUST COLLECTOR). It was his intention to follow this up to see if there were applications for the use of foam spray in the processing of friction materials. Suggestions were made that if a foam spray got into the product during the mixing or briquetting stages that it could have an affect on friction material. It was suggested that perhaps the best application for a product of this type was during the drilling or the grinding operations. It was stated that one of the problems with a spray, or with a paint for that matter, on the finished product was that it did have an effect on initial brake or clutch application. This subject was to be investigated further by Bendix to see whether it did have application in their processing.

EFFLUENT GUIDELINES FOR FRICTION MATERIALS MANUFACTURERS

Mr. Weaver showed a document prepared by Sverdrup & Parcel who are consultants for the EPA. This document was entitled, "Development Document for the Proposed Effluent Limitations Guidelines and New Source Performance Standards for the Textile, Friction Materials and Sealing Devices Industries". This had been published by Sverdrup and Parcel for the EPA. Immediately after the meeting I called Dr. Buzzell of Sverdrup and Parcel. He did not have additional copies available. He suggested that I write individuals in the EPA. He gave the addresses for contacting Dr. Richard Gregg and Mr. J. E. Riley. The Secretary was directed to get copies of this document to all Members of the Institute.

There was a concurrent study being sponsored by the EPA which was being done by Arthur D. Little. This concerned the economic effects of EPA Effluent Regulations. The Secretary was directed to contact Mr. Basil Igwe to see what the status is on this work.

USE OF BRUSHES TO SEAL MACHINING OPERATIONS

Mr. Wagner of Carlisle showed a simple brush that he used in his machining operations. The brush would permit the tools (or the part depending upon the operation) to move by into the enclosure where it was being machined (drilled, cut, other). Chips would fall down. Dust would be collected. The brush would seal the area where the machining was being done and reduce the dust that ordinarily would leak past the seal. Also it permitted the dust collector to exhaust the asbestos dust with a greater vacuum. They use such a device in grinding, drilling, and chamfering operations. Mr. Wagner indicated that steps such as this have gone a long way in reducing asbestos concentrations in the work place.

INSTITUTE SEMINAR ON SAFETY AND HEALTH

At the June 1973 meeting it was suggested that the Institute consider sponsoring a seminar on safety and health. Most of the subjects were related to the asbestos problem. After questionnaires were sent out and reviewed it was decided by the Chairman of the Asbestos Study Committee and the Secretary of the Institute that there was not sufficient interest in such a seminar for the Institute to sponsor it. It was indicated that the members of the Committee, or those suggesting such a seminar, would have to take a very active interest in promoting such a seminar. At this time the Asbestos Study Committee does not recommend further action as regards a seminar.

There being no further business brought to the attention of the Committee, upon motion duly made, seconded and unanimously passed, it was

RESOLVED: To adjourn.

Adjourned: at 1:30 P.M.

E. W. Drislane
Secretary

MINUTES OF THE MEETING

of the

ASBESTOS STUDY COMMITTEE

Friday, October 24, 1975, at 9:30 AM

Institute Office, E-210 Route 4, Paramus, N.J.

*FMSTI-9
8/23/82*

MEMBERS PRESENT

H. Wagner, Chairman
E. H. Feierabend
D. E. Stone
I. H. Weaver
J. Dunderdale

Carlisle Corporation
Abex Corporation
Bendix Corporation
Raybestos-Manhattan, Inc.
Royal Industries

OTHERS PRESENT

M. R. Cole
E. W. Drislane.

Clapp & Eisenberg
Friction Materials Standards Institute

MEMBERS NOT PRESENT

M. Jacko
E. P. Stefl

Bendix Corporation
H. K. Porter Co.

The meeting was called to order by Mr. Wagner, Chairman, at 9:30 A.M.

MINUTES OF PREVIOUS MEETING

The Minutes of the Meeting held April 28, 1975 had been distributed. These minutes were reviewed and a motion for their acceptance was made.

Upon motion duly made, seconded and unanimously passed, it was

RESOLVED: To accept the minutes of the April 28, 1975 meeting as written.

ASBESTOS INFORMATION ASSOCIATION CONFERENCE

The Asbestos Information Association (AIA) held their annual Government-Industry Conference in Washington on September 10-11, 1975. Non-members of AIA were invited to attend this conference. Several individuals representing friction materials attended.

One of the items of interest was the proposed OSHA regulation which was due near the end of September. It had been indicated that the OSHA standards would be oriented more towards work practices than to a numerical standard. Mr. Weaver indicated that the OSHA individual who indicated this did so believing that the new standard would not have a new numerical limit. Apparently there was alot of movement within OSHA by other groups--possibly labor unions and NIOSH--and that the proposed lower numerical standard came in at the very end of the write-up as it was

MAR

000096

prepared for publication. The standard, which will be discussed later, proposed a numerical standard of 0.5 fibers/cc (TWA).

Several attendees stated that this conference was most worthwhile. It gave a good overview on asbestos. The only criticism made was that the speakers did not have sufficient time to be questioned after their presentations. The Institute will continue to monitor this conference and expresses its support of the work of the AIA.

PLANS FOR INSTITUTE SEMINAR ON ASBESTOS

Mr. Wagner and Mr. Drislane had taken the initial steps to organize this seminar. At the April 28, 1975 meeting of the Asbestos Study Committee a resolution was passed recommending that the Institute sponsor a workshop on the asbestos problem in the fall of 1975. This resolution was reviewed with the President of the Institute, Mr. Simon, and it was decided to proceed with such a seminar. Mr. Wagner contacted Mr. Noel Hendry of Johns-Manville relative to his putting on a session similar to that which J-M presented two years ago. (For reference: Mr. Noel Hendry, Denver, Colorado, telephone 303-770-1000, Extension 2142). It was suggested that the Johns-Manville presentation would have to be the corner-stone of any seminar and that this would have to be arranged first before arranging other presentations.

Mr. B. K. Kwon of OSHA had been invited by Mr. Wagner to address this seminar. Mr. Kwon had indicated that he should be able to attend. It was suggested that the seminar would be a good time for a synopsis of the major points of the new OSHA standard. Also it would be well for Mr. Kwon to talk with people from our industry.

A comment was made to the effect that OSHA had misled those attending the conference in Washington indicating that the proposed standard would be work practices oriented. (The standard came out with a lower numerical limit.) It was stated that Mr. Kwon was knowledgeable in the industrial hygiene area but he was not a policy maker. He was not responsible for the addition of numerical standard in the proposed amendments to the OSHA regulations.

Mr. Drislane indicated that he had talked with Mr. Bob Mereness of the Asbestos Information Association, and Mr. Mereness indicated that he would be pleased to attend. Also Mr. Drislane contacted Mr. R. Magdelain of Milfisk of America Inc. Mr. Magdelain would be most pleased to put on a presentation relative to that type of vacuum cleaner for the work place. Mr. Wagner also talked with Mr. W. Engeleightener of Ferro-Tech relative to their pelletizing equipment. Mr. Engeleightener will also make a presentation.

At the meeting Mr. Wagner called Mr. Noel Hendry to firm up the J-M participation. In summary, it was indicated that Mr. Bill Reitze would discuss the medical aspects of the regulations. Mr. Ed Fenner would review OSHA and EPA regulations. Mr. Noel Hendry would discuss fiber handling. The J-M presentation will require a 35 mm projector, a 60 x 60 screen, along with a podium and a PA system. Mr. Drislane indicated that arrangements for these would be made.

The seminar will be scheduled for Wednesday, December 3, and Thursday, December 4. The opening session will be a presentation by Johns-Manville for the full afternoon on December 3. Other topics will be scheduled on Thursday morning, with Mr. Mareness (or someone else from AIA) talking at the luncheon on Thursday. There would be a registration fee of \$10 for the seminar. Mr. Drislane will try to make arrangements at either the Marriott at Saddle Brook, the Ramada Inn in Rochelle Park, or the Sheraton Heights in Hasbrouck Heights. Mr. Drislane will write Mr. Magdelain and Mr. Mareness to officially invite them. Mr. Wagner will write to Mr. Kwon, Mr. Engleightener, and Mr. Hendry to firm up the arrangements. The committee recommends that Messrs. Wagner and Drislane plan and schedule the seminar.

It was suggested that the type of person to be invited should be someone involved with plant problems, but it should also be the foreman or other individual who could get across the message to not use an air hose or a broom.

The possibility of a movie being shown was discussed. It was suggested that the controversial interview of Dr. Selikoff and Dr. Lewinsohn of Turner Brothers would not be the right presentation. Perhaps a movie that emphasized controls in the work place might be worthwhile. No decision was made as regards a movie.

Another suggestion was to have a presentation by those who have used foam to envelope the work station so that no dust is raised during mixing. Mr. Weaver felt that this was an interesting technique. Mr. Stone had discussed this at an earlier meeting but had made no further progress on this since that time. It was decided that this would not be added to the agenda.

As regards the Nilfisk equipment, it was noted that this is good equipment for local pick-up of dust and debris in the work place. However, this subject should be expanded to include a central system such as a Hoffman unit. It was felt that this session should be called "housekeeping in the work place" rather than "Nilfisk". However, the Nilfisk representative would discuss his unique equipment. The idea was to sell the concept of cleaning the work area (not to sell the vacuum cleaner). Mr. Drislane will indicate this particular point to Mr. Magdelain in his invitation.

AIA BOOKLET "ASBESTOS AND BRAKE LININGS"

Mr. Mareness requested Mr. Drislane to have this booklet reviewed for update and corrections. The first question raised was "Who is this booklet aimed at?". Also, "What is the purpose of this booklet?" It was stated that this write-up was not a complete presentation of any particular aspect of the asbestos problem, and while interesting insofar as it went, was not particularly convincing. It is not the type of message that would ordinarily be given to customers of friction material manufacturers. The message for re-builders and the garage people is to not create dust in the work place. There should be more emphasis, if this was the direction of the booklet, on such things as labelling, possible use of instruction sheets, the handling of lining, and the proper use of exhaust systems. One of the problems in the field is that these customers will often groove, chamfer or provide extra drilling. It is during these subsequent operations that asbestos concentrations may be raised to levels above that allowable. It was pointed out the Asbestos Study Committee could not re-write a draft unless it knew what the booklet was aiming at. It was stated that the title is wrong. Perhaps there should

be two separate pamphlets, one for the garage and the re-builder type operation (for those who are doing brake service), and another for the general public. It was stated that the audience for this booklet, as written, must have been the environmentally concerned customer.

Mr. Weaver suggested alternatives as regards this write-up: (1) Drop it-- do not use it. (2) Rewrite it for those servicing and installing friction materials. (3) Write a complete new article. The write-up made has little impact. One advantage may be the listing of reference material at the end of the booklet. If the AIA believes that the booklet should get to the user (the customer of the friction materials manufacturer) it is suggested that information be given to the user as indicated in the proposed regulations under "DANGER" labels. This concerns the requirement during "any reasonably foreseeable use, handling, storage, disposal, processing, or transportation" that no airborne concentrations of asbestos fibers in excess of the exposure limits prescribed be released. The items that follow this section on housekeeping and waste disposal are particularly pertinent to the users of friction materials prior to installation on a vehicle.

Mr. Drislane was advised that the Asbestos Study Committee will not re-write the article. The Committee recommends emphasis on recommendations for garages and the re-builders. The Committee would be happy to review a new write-up prepared by AIA which was aimed for this user, with emphasis on the those who actually do subsequent work on friction materials such as grooving, cutting, grinding, chamfering, etc.

RECOMMENDED PROCEDURE FOR BRAKE AND CLUTCH SERVICING

This write-up had been prepared by the Raybestos-Manhattan, Inc. Mr. Weaver distributed copies to Committee members. Raybestos would welcome comments on this write-up along with any recommendations for changes. Committee members wishing to comment should send their recommendations to the Institute office.

THE PROPOSED OSHA STANDARD AND THE 0.5 FIBER/CC LIMIT

Prior to discussing details on the proposed OSHA standards, several members stated that they had been inspected by OSHA. While in a few cases citations were made for higher concentrations of asbestos than permitted, there had been many instances where counts were made without a citation. While the values on the concentration are revealed when a citation is made, OSHA does not provide information on the counts when a citation is not issued. Several members indicated that they believed that OSHA will not provide written results on their test in the work place unless it is necessary to support a citation. In other words, where a citation is not involved they will not reveal the data. Legal Counsel will check on the availability of this information and whether OSHA can be requested to provide this data when a citation is not involved, and will report in writing to the Institute on this.

The proposed OSHA standard is far reaching. The main problem is the new more difficult numerical standard (0.5 fiber/cc). OSHA has put out a list of rather specific items for public participation with the main item being that the comments must be postmarked on or before December 8, 1975.

Written comments concerning the proposal must be submitted in quadruplicate:

Docket Officer, Docket H-033
US Department of Labor, Room N3620
200 Constitution Avenue N.W.
Washington, D.C. 20210

The question was asked as to what would be the most effective means of communicating with Washington to indicate the problems with this new numerical standard. Should the Institute comment? Should the individual members comment? It is not enough for the manufacturer to feel his views will be represented to the regulators by the Asbestos Information Association or FMIS. It was suggested that it would be best if both the Institute and individual members respond with points that are particular to their factories. It is felt that participation by the small manufacturer will be most meaningful. The Asbestos Study Committee will review the proposed standard and note some of the points that members may wish to comment on. It should be pointed out that even if members comment to the effect that they support the AIA comments or they support the FMIS comments, at least they will be on record espousing their viewpoints.

A comment was made to the effect that everyone has been gearing to get their concentrations down to the 2 fiber/cc limit by July 1, 1976. The technology necessary to take the count down to 0.5 fiber/cc is not known. How can comments be made on the cost impact, effects on competition, effects on employment, effects on energy supply, when the technology for getting to the 0.5 fiber/cc is not even known at this time? The least that can be done is to request an extension of time for comments past December 8, 1975. Upon motion duly made, seconded, unanimously passed it was

RESOLVED: That the Institute will request the Department of Labor to delay the cut-off date for comment on these proposed amendments to April 1, 1976.

~~The friction materials industry does not know whether the 0.5 fiber/cc limit can be reached.~~ Perhaps it will be necessary to go to materials with a material cost ten times that of asbestos in order to get the work place down to the proposed level. Industry is confronted with requirements for Standard 121 and Standard 105-75 from the National Highway Traffic Safety Administration with stringent friction materials requirements at the same time that they must evaluate whether they can still use asbestos in their products.

There are several points in the OSHA standard besides the 0.5 fiber/cc limit. However, the main problem is the 0.5 fiber/cc limit. Some of the comments to follow concerned new problems that may arise as a result of this proposed standard. These problems will be pointed out to the members so that they can look at these from their viewpoints with the aim of advising Washington on their individual problems with this standard.

~~The reduction of the limit to the 0.5 level is going to effect processors such as the re-builder and the garages who were not really included in this standard before. Any outfit that handles friction materials may very well find airborne concentrations of asbestos fibers that exceed the 0.5 fiber/cc level. For example, a junk yard which might have a side line in brakes might have no problem at the present time. However~~

any work that they might do which could bring their concentration above 0.5 fiber/cc would now be a problem. These people would now be covered by the requirements of the OSHA standard. Many smaller operators have to drill materials to adapt them to unique shoes in the field. Additional drilling would probably move concentration levels well above the maximum ceiling concentration of 5 fiber/cc.

A point to be mentioned is not to adopt the tactic of "You can't do it." ~~The point is that at the present time technology is not available in the factory to get down to these levels. The industry does not know what the costs are.~~ How can comments be made on cost impact, competition, employment, energy, etc. when the technology to get there is not known? Still further, is such a limit necessary?

It is suggested that unless a member has specific medical information suitable to refute the proposals in the standard that he not attempt to resist the 0.5 fiber/cc limit based on non professional observations of workers made in the past. In other words, if it was not good medical information don't use it. The Asbestos Information Association will try to assemble some realistic medical information for consideration by the Department of Labor.

As regards the problem with cost impact on the consumers, it may be that clean rooms for the elimination of asbestos may be required. Without knowing figures perhaps costs will more than double with poorer performance at a time when the National Highway Traffic Safety Administration is calling for even higher performance.

Members have made extensive plans for equipment, exhaust systems and procedures to get to the 2 fibers/cc limit on July 1, 1976. Since this equipment will not get them to the 0.5 fiber/cc level, this huge capital investment should perhaps be stopped until such time as a new standard is decided. Should a manufacturer discontinue his heavy commitment to equipment for the 2 fibers/cc limit when this equipment will not meet the 0.5 fibers/cc limit?

Could there be more emphasis on protective clothing with cover-alls, smocks, boots and gloves as well as a respirators. With reduction to the two fibers/cc level on July 1, 1976 and better work practices, the clothing might do the job as well as the new difficult-to-measure 0.5 fiber/cc limit.

The members don't know how low they can get in fiber counts until this new collection equipment is actually installed and in operation. Suggestions made for cleaning the work area are all well and good but the only proof that one has reached an arbitrary fiber limit is when the installation is completed.

As regards energy who can say that if double the horsepower was added to collection systems that they would get down to the new limit? How can the energy cost be estimated until this same equipment has actually reduced the concentrations down to the new levels?

Where regulated areas are established where allowable concentrations may be exceeded, it is difficult to get employees to wear the proper clothing. If one were trying to operate a clean room along with proper protective clothing, employees would want air-conditioning in the

work place for the uncomfortable clothing. To require air-conditioning in the work place while also maintaining the extensive exhaust systems would be prohibitively expensive--if it can be done at all--because one is at cross purposes with the other. Costs also will be increased because of the new monitoring requirements.

As regards the effect on competition it was pointed out that this may very well be the trigger which would close down some marginal operations with a resulting transfer of jobs outside of the U.S. Even in Great Britain where much medical information has been gathered they have not gone to the 0.5 fibers/cc limit. It does not appear that Great Britain has sufficient medical evidence to support such a limit. Countries on the continent do not have this 0.5 fiber/cc limit. The Latin American countries have no limits. As regards the effect on employment and competition, the huge capital expenditures required for the U.S. plants may very well export additional jobs.

While some of the procedures recommended for handling asbestos and removing the worker from contact with the product may show labor saving results, the actual level of exposure to the remaining workmen from these changes still will be quite high.

There would be considerable costs for members in the friction materials industry to requalify brake blocks and heavy duty segments for the requirements of the FMVSS Standard 121 which went into effect during 1975. There has been a considerable expenditure of funds for Standard 105-75 (hydraulic brake systems standard) by many members. Any changes in the processing or compounding of friction materials necessitated by the proposed OSHA standard would add additional costs for manufacturers in requalifying their materials. The friction materials industry in particular is caught between the forces of improved performance of braking materials along with restrictions on how to manufacture and distribute their materials. There may be considerable testing to requalify materials if there should be a change in processing or compounding.

As regards the costs to consumers and society in general the industry does not know what can be done if it is necessary to remove asbestos from brake lining. The industry could be subject to 5 - 10 years of serious dislocation. In addition to the problems with the OSHA standard that appear evident, costs can not be quantified at this time. Industry needs more time to respond to these far reaching regulations.

One of the requirements for record keeping stated that the records must be maintained for forty years, or for an employment interval plus 20 years, whichever is longer. This is a considerable record keeping requirement. However it was stated that perhaps this is necessary in order for subsequent study of the epidemiology of asbestos. It was suggested that perhaps this is one of the new proposals that can be lived with.

In prior meetings and at prior workshops the problem of correlation of fiber count has been discussed. In general there seems to be some agreement that different experienced counters may total up results showing as much as a 30% variation in counts from the same sample. This is already a problem. However these counts where the 30% variation is evidenced are in the 2 fibers per cc to 5 fibers/cc area. A 30% difference with a 5 fiber/cc count is 1.5 fiber/cc. Here, OSHA is asking for a concentration limit of 0.5 fibers/cc when with current observations there can be variations of as much as 1.5 fibers/cc. As concentrations move towards 0.5 fibers/cc not only does technology get more difficult but obtaining accurate readings become more of a problem.

Industry conditions in 1975 (under the current 5 fibers/cc limit) are much improved over industry conditions which were in effect through most of the 1960's. Each additional step approaching zero fibers/cc is a lot more difficult than the steps that were taken to get industry down to the 5 fibers/cc limit. While it will be burdensome to move the concentrations to the 2 fibers/cc limit, the steps necessary to get down to 0.5 fibers/cc are not known.

There are requirements in the proposed standard for worker re-assignment. If many employees are moved to lesser and lesser duties maintaining the same premium pay that they had received for working with the asbestos products, there will be a negative productivity result. It has been industry practice in the past for night shifts and more difficult tasks to command higher pay premiums. This rotation to another job with no loss in pay will be another penalty to productivity.

The recommendations that will be made by the FMSI or the AIA are not known at this time. It is believed that the AIA stand will include background on medical information. However, it is most important that the individual companies make a response. They should not expect that someone else will write it for them. The Secretary will prepare a bulletin to be sent to the membership suggesting that they comment to OSHA on these requirements. It will be pointed out that the comments must be those of the individual member and they should not echo the suggested outline of problems which the Institute will prepare.

It was also pointed out that there are a lot of new items in the proposed regulations including items on loading, unloading and storing of asbestos cargo. The carrier—be it a railcar, ship or other—must make a visual inspection of the cargo and cargo space to determine if leakage or spillage of asbestos has occurred. Who does this? Does the carrier do this? Are the carriers aware of this problem? A close reading of the proposed OSHA standards revealed many problems of this nature which will have to be pointed out to others who may not feel that they are affected by the asbestos regulations.

THE EPA NATIONAL EMISSIONS STANDARDS FOR ASBESTOS

The Environmental Protection Agency published the amended standards for the National Emissions Standards for Asbestos. This appeared in the Federal Register October 14, 1975. Ordinarily the EPA amendments would be an item of prime concern to the manufacturers. However the proposed OSHA standards are so extensive and so far reaching they must take priority over these new EPA Standards. It was pointed out that the EPA notice is the adoption of the amendments to the standards. These are not proposed amendments.

In particular the waste disposal requirements are of interest to friction materials manufacturers. The friction materials manufacturer is responsible to see that land-fill operators and trucks carrying waste comply with the requirements of EPA on disposal of asbestos bearing materials. The manufacturer is responsible for supervision to see that these requirements are carried out.

Members reviewed the section 61.25 on waste disposal. There was some difficulty with interpretation. Mr. Weaver pointed out that the requirements for covering the asbestos containing material were applicable only if there were visible emissions to the outside air from the waste disposal site. In other words, if there were "no visible emissions" requirements (e)(1) and (e)(2)

of 61.25 do not come into play. However these requirements for cover do take effect if there are any visible emissions. The most difficult areas of the new EPA standard are in the waste disposal area.

There was no other business called to the attention of the committee. Upon motion duly made, seconded and unanimously passed it was

RESOLVED: To adjourn.

Adjourned: 2:15 PM

E. W. Drislane
Secretary