

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

FMSI-7
8/23/82

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

PLAINTIFF'S
EXHIBIT

NO. FM105

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

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

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 Igwa 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