

FRICTION MATERIALS STANDARDS INSTITUTE, INC., E-210 ROUTE 4, PARAMUS, N. J. 07652

B U L L E T I N

N O. 5 5 1 B

October 30, 1975

PROPOSED AMENDMENTS TO THE OSHA ASBESTOS STANDARD

When BULLETIN NO 551A was mailed, a copy of the proposed amendments to the OSHA Asbestos Standard was sent to one individual for each Active Member. These proposed amendments were in the Federal Register of October 9, 1975. If an additional copy of these proposed amendments is needed, please contact the Institute Office.

We are enclosing with this notice copies of three overviews of the proposed OSHA Asbestos Standard. These overviews are by:

Asbestos Information Association
Occupational Health and Safety Letter
Internal Overview-Member Company

We believe these three overviews, when read with the full text as it appeared in the Federal Register, help highlight areas of concern to manufacturers of asbestos containing friction materials. The main item is the proposed lower limit of 0.5 fibers/cc (TWA). However, there are several additional requirements that may prove quite burdensome and costly.

It is strongly recommended that individual companies make their views known to the regulatory authorities. Written comments were called for (in quadruplicate) by December 8, 1975. We will ask for additional time in which to comment. Comments should be addressed to:

Docket Officer, Docket H-033
U. S. Department of Labor, Room N-3620
200 Constitution Avenue, N. W.
Washington, D. C. 20210

In particular, we call your attention to the Federal Register notice, page 47659, VII - PUBLIC PARTICIPATION.

On a separate write-up we are including some concerns raised at our recent Asbestos Study Committee meeting relevant to the proposed amendments. We suggest any comments be your own--as they affect your plant. The discussion is simply to call your attention to some of the problem areas with these proposals. Among the comments made at the committee meeting were:

- (1) Don't say "We can't do it"
- (2) Do not dispute the medical evidence unless you have solid medical records to prove your point.
- (3) Don't expect arguments by the Asbestos Information Association or the FMSI to carry the day. If individual manufacturers don't comment, the Department of Labor may feel there will be no problem meeting these new standards.

EWD/erc
Enclosure:

E. W. Drislane
Executive Director

F-15
(12)

10/30/75

INFORMAL COMMENTS ON PROPOSED OSHA ASBESTOS STANDARD

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
U. S. Department of Labor, Room N-3620
200 Constitution Avenue, N. W.
Washington, D. C. 20210

While an extension of time for filing comments is being requested, there is no way of knowing whether an extension will be granted.

The question has been 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 FMSI. It was suggested that it would be best if both the Institute and individual members respond with points that are particular to their factories. If it is felt that participation by the small manufacturer will be most meaningful. It should be pointed out that even if members comment to the effect that they support the AIA comments or they support the FMSI comments, at least they will be on record espousing their viewpoints. Obviously, the AIA and FMSI comments will have to be prepared before this can be done.

It is most important that the individual companies make a response. They should not expect that someone else will write it for them. The comments must be those of the individual member and they should not echo the suggested outline of problems which the Institute prepared.

1. Medical

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 is 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.

2. Technology for reaching 0.5/fiber/cc TWA level

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?

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, when the technology for getting to the 0.5 fiber/cc is not even known at this time?

FMSI 03269

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?

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 to 0.5 fibers/cc are not known.

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 concentration down to the new levels?

3. Fiber counts by the membrane filter method

The members don't know how low they can get in fiber counts until 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.

In general there seems to be 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 fibers/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 fiber/cc not only does technology get more difficult, but the readings get more difficult.

The friction materials business is different from regular asbestos manufacturing. In addition to asbestos, we have other materials in the product such as resins, carbon blacks, friction dust and various minerals. It is possible that some of these may be picked up during the sample gathering before the count. In some cases these could be counted by inexperienced operators as asbestos fibers. In essence it is more difficult to count asbestos in a friction material environment than it is in a textile environment. It is felt that there may be greater difficulty in getting consistent readings on fiber counts in the friction materials business. For that reason friction material manufacturers would prefer a work practices oriented standard.

While the membrane filter method may be the only method that is available currently for measuring airborne asbestos, and it is not felt that there is another method that can take its place, it is a tool that should be used by manufacturers trying to clean up their areas. It is not felt that this tool is accurate enough to be used for enforcement purposes. It is suggested that OSHA inspectors must realize this before factories are closed down and fines are levied when there is doubt as to how accurate the measurement is. Because of the wide variation in results there is concern among members as to the millions of dollars now being put into control methods. Even with these expenditures, there is no way of knowing positively whether industries are getting their counts down to the required levels. Various words are used to describe the reliability of the membrane filter method for enforcement: It has been called "unreliable" and "inadequate". While it is the only tool now available it is not the proper

4. Groups other than manufacturers will now be involved

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.

It is also pointed out that there are alot of new items in the proposed regulations including 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.

5. NHTSA demands on brake lining manufacturers are at cross purposes with OSHA and EPA restrictions on formula and processing.

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.

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 would be considerable costs for members in the friction materials industry to requalify brake blocks and heavy duty segments for the requirements of the NHSTA 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.

4. Groups other than manufacturers will now be involved

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.

It is also pointed out that there are a lot of new items in the proposed regulations including 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.

5. NHTSA demands on brake lining manufacturers are at cross purposes with OSHA and EPA restrictions on formula and processing.

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.

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 would be considerable costs for members in the friction materials industry to requalify brake blocks and heavy duty segments for the requirements of the NHTSA 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.

6. Competition and industry dislocation

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 problem with the OSHA standard that appear evident, cost can not be quantified at this time.

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.

7. Record-keeping and monitoring

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.

Costs will be increased because of the new monitoring requirements.

8. Worker assignment and protective equipment

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 exposure to the remaining people from these changes will still be quite difficult.

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. One can't match up air-conditioning in the work place with the extensive exhaust systems because one is at cross purposes with the other.

Could there be more emphasis on protective clothing with cover-alls, smocks, boots and gloves as well as a respirator rather than numerical limits? 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.

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.



ASBESTOS INFORMATION ASSOCIATION

1660 L Street, N.W. / Washington, D.C. 20036 / (202) 223-4885

COPY

1 October 1975

URGENT

Memorandum For: MEMBERS

Subject: Proposed Revision to OSHA Asbestos Standard
(29 CFR 1910.1000)

On September 30, the Secretary of Labor signed a document proposing a revision to the Occupational Safety and Health Administration standard for exposure to asbestos. A copy of this document is rushed to your attention. The document is scheduled for official publication in the Federal Register on Thursday, October 9.

OSHA Proposed Standard Would:

- ... Reduce the permissible exposure limit to a TWA of 0.5 fibers per cubic centimeter (500,000 fibers per cubic meter) and reduce the ceiling limit to 5 fibers per cubic centimeter (5 million fibers per cubic meter).
- ... Add a 15 minute sampling period for determination of the ceiling limit.
- ... Establish additional requirements for regulating areas, employee rosters, hygiene facilities, employee information and training, signs and labels, monitoring and medical surveillance.
- ... Extend the period for retention of monitoring and medical records to 40 years or for the duration of the employees' employment plus 20 years, whichever is longer.
- ... Exclude construction activities from revised standard but would continue coverage of these activities under the existing standard. It is intended that a separate revision would be proposed for the construction industry.

FMSI 03274

Major issues raised by this proposal and for which public comment is invited:

- ... Whether the permissible limit for an 8-hour time weighted average exposure (TWA) should be lowered to 500,000 fibers per cubic meter (0.5 fiber per cubic centimeter), and if so, would such an exposure provide an adequate margin of safety to protect employees against known and suspected workplace hazards of asbestos.
- ... Whether the permissible ceiling limit should be reduced to 5 million fibers per cubic meter (5 fibers per cubic centimeter) and, if so, would such an exposure provide an adequate margin of safety to protect employees against known and suspected workplace hazards.
- ... Whether the proposed retention period for medical and monitoring records of former employees would be appropriate and adequate.
- ... Whether the information gathering requirements of the proposal would create any administrative and economic burdens on employers, particularly those employing small numbers of employees or having workforces which are highly transient.
- ... Whether the provision for job reassignment on account of medical unsuitability adequately and effectively furthers the purposes of the Act.
- ... Whether compliance with the proposal would be technologically and economically feasible for all affected industries.
- ... What are the projected environmental and inflationary impacts of the proposal.

Inflationary Impact Assessment:

- ... In accordance with Executive Order 11821 and OMB Circular A-107, OSHA intends to prepare a statement which will assess the inflationary impacts of the proposed standard. This statement will be made available to the public at least 30 days prior to a public hearing on the proposal. Written comments and oral testimony on the anticipated economic impact will be welcome.

Effective Date:

- ... The proposal does not contain an anticipated effective date at this time. Following review of the environmental and inflationary impact assessments and the record of the public hearing, if one is held, OSHA will propose a date

Page 3

on which the final standard will become effective.


R. H. Mereness
Executive Director

cc: Distribution List A

Enclosure
RHM:vld

FMSI 03276

ASBESTOS EXPOSURE LIMIT CUT SHARPLY—BUT NO EFFECTIVE DATE SPECIFIED:

The proposed standard for asbestos went beyond the terms of the court's remand to the Labor Department on the basis of the lawsuit filed by the Oil, Chemical & Atomic Workers and Health Research Group. The court merely required OSHA to amend the provisions regarding record-keeping by companies and the effective date of the standard.

But OSHA went beyond those terms to revise the numerical limits downward eventually to 0.5 fibers per cubic centimeter of air—and surprised many people by setting no effective date pending a public hearing. The 0.5 fiber level would apply to an eight-hour time-weighted average.

The proposed standard also reduces the ceiling limit, determined during any 15-minute sampling period, to 5 fibers per cc.

It would extend the period for retention of monitoring and medical records to 40 years, or for the duration of the worker's employment plus 20 years, whichever is longer—in recognition of information indicating that cancer may not appear clinically until 20 years or so after exposure. The current record retention period is three years for monitoring and 20 years for medical records.

The standard would also establish additional requirements for regulated areas, employee rosters, hygiene facilities, worker training and information programs, signs and labels, and monitoring and medical surveillance programs.

The present asbestos exposure standard was issued by OSHA on June 7, 1972. It requires that worker exposure be limited to no more than an eight-hour time-weighted average of 5 fibers per cc, with a ceiling of 10 fibers. The same rule would reduce, effective July 1, 1976, the eight-hour exposure limit to 2 fibers. This standard was attacked in the OCAW-HRG lawsuit.

The 1972 recommendation by NIOSH was for 2 fibers, longer than 5 microns, per cubic centimeter as an eight-hour time-weighted average, with a ceiling of 10 fibers determined by a minimum sampling time of 15 minutes.

OSHA said several major issues were raised by the proposed standard for which public comment is invited.

In addition to the numerical limit and record-keeping requirements, they included:

- * Whether the information gathering requirements of the proposal would create any administrative and economic burdens on employers, particularly small businesses or those with transient workforces;
- * Whether the provision for job reassignment on account of medical unsuitability adequately and effectively furthers the purposes of the Act;
- * Whether compliance with the proposal would be technologically and economically feasible for all affected industries;
- * The projected environmental and inflationary impacts of the proposal.

Construction activities are excluded from the revised standard. Separate rulemaking is planned to revise the asbestos standard for the construction industry.

Written comments and requests for a public hearing on the proposal should be submitted (in four copies) within 60 days to the OSHA Docket Office, Docket No. H-033, Room N3620, U.S. Department of Labor, 3rd & Constitution Ave. N.W., Washington, D.C. 20210.

R.H. Mereness, Executive Director of the Asbestos Information Association North America, commented that "the proposed drastic change in permissible exposure is surprising and unexpected. Many questions remain to be raised. The document calls for full discussion, and I am certain there will be.

"Industry recognizes the risk to health from asbestos dust and is dedicated to the control of that risk in both the workplace and in the open environment so that asbestos, with its unique properties, may continue to be manufactured with safety to the workers and to the public. The underlying question is the OSHA document, which remains to be answered, is what is a safe and realistic level of exposure."

Occupational Health & Safety Letter, October 8, 1975

PROPOSED OSHA ASBESTOS STANDARD

October 9, 1975

On October 9, 1975, a new proposed OSHA asbestos standard was published in the Federal Register. The proposed standard has stricter requirements than the present OSHA standard. A summary of the proposed standard follows.

1. The Construction Industry is excluded.
2. Applies to all locations where asbestos or products containing asbestos is manufactured, processed, packaged, stored, applied, used or otherwise handled.
3. The allowable eight-hour time-weighted average concentration is 0.5 fibers/cc and the allowable ceiling concentration is 5 fibers/cc. (The present standard calls for a 2.0 fiber/cc average and 10 fiber/cc ceiling effective on 7-1-76.)
4. Regulated areas must be established where the allowable concentrations are exceeded.
 - a. Only authorized employees may enter area.
 - b. A daily roster of all persons entering the area must be maintained.
 - c. Respirators and respirator programs are required.
 - d. Employees must be allowed to leave the area to wash their face and clean their respirator.
 - e. No eating, drinking, smoking or chewing is allowed in the area.
 - f. Change rooms are required with separate lockers, showers, etc.
 - g. Employees must be provided daily with clean and dry protective clothing to include coveralls, head covering, gloves and foot covering.
5. Monitoring is required in all exposure areas.
 - a. Monthly if greater than the allowance exposure.
 - b. Quarterly if within the allowable exposure.
 - c. Can be discontinued if two consecutive samples within a certain time frame are within the allowable levels.
 - d. Not every employee need be monitored.
 - e. Required after every process change.

6. Engineering controls are required to reduce the exposure, even if they won't result in asbestos levels within the allowable limits. Periodic exhaust system checks are required.
7. A medical control program with preplacement, annual and termination exams is required.
 - a. X-rays, pulmonary function tests, sputum cytology and medical history are included.
 - b. There are provisions made for an employee's refusal to take the examination.
8. A compliance program must be developed and made available, on request, to OSHA. The program must be revised and updated every six months.
9. Employees whom the doctor says cannot function normally while using a respirator shall be, to the maximum extent possible:
 - a. Rotated to another job.
 - b. Given the opportunity to transfer to another job, subject to the following requirements:
 - i. Duties he can perform.
 - ii. Same employer.
 - iii. Same geographical area.
 - iv. Same seniority, status and rate of pay.
10. Danger signs and labels, housekeeping and waste disposal provisions are included.
11. Extensive recordkeeping requirements are included with respect to asbestos monitoring and medical examinations. Monitoring records must be made available to employees upon request. Medical records must be made available to employees' doctors upon request. All records must be made available to OSHA upon request. Records must be maintained for 40 years or an employee's employment interval plus 20 years, whichever is longer.
12. Employee training programs, both preplacement and annual, are required. The programs are to include the how and why of operating procedures, medical examinations, etc. Employees are to have access to the asbestos standard and training materials.