

FRICTION MATERIALS STANDARDS INSTITUTE, INC.

BERGEN MALL OFFICE CENTER

E. 210 ROUTE 4

PARAMUS, N. J. 07652

February 6, 1976

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

COPY

Gentlemen:

The Friction Materials Standards Institute, Inc. is an association of most of the domestic brake lining and clutch facing manufacturers. We also service eighteen foreign manufacturers of friction materials. Asbestos is an important ingredient in most friction articles, and the proposed revisions to the standard for occupational exposure to asbestos will have a major impact on this industry.

Our members support the concept of government regulation to safeguard the health of its workers, and with the cooperation of the workers this can be done. However, we feel that certain elements of the proposed regulations and the background data used for their development are highly controversial and need to be reviewed and reconsidered in light of their possible future social and economic impacts on business, labor, and the general public.

The Institute has urged its members to make individual replies in order to participate in this rulemaking. The Institute's comments will not cover certain subjects such as monitoring procedures, exhaust ventilation, and hygiene facilities that can best be commented on by individual manufacturers. As an association, we cannot speak for all our members because certain proposals are controversial within our industry. Because of this we do not necessarily concur with those proposals on which we have not commented. We hope that individual members of the industry will comment directly to OSHA on those subjects.

1. PERMISSIBLE EXPOSURE TO AIRBORNE CONCENTRATIONS OF ASBESTOS FIBERS

The proposed 8 hour time weighted average concentration limit of 0.5 fibers/cc and the ceiling concentrations limit of 5 fibers/cc are the most controversial requirements.

1.1 Exposure limit rationale based on British experience

In developing the rationale for the 0.5 fiber limit (TWA), considerable weight was given to Great Britain's 2 fiber/cc limit, and improved working conditions that resulted from their 1931 Factory Regulations. Our members contend that their friction materials factories are far cleaner today than were their Great Britain counterparts of 1933 "when important improvements in work practices had been achieved." Our members doubt that levels consistently below 10 fiber/cc were achieved until after Great Britain imposed the revised Asbestos Regulations in 1968. Knowledgeable individuals claim British factories have not achieved the 2 fiber/cc level on a consistent basis on all operations. We believe alleged British compliance with the

2 fiber/cc limit has had an unwarranted bearing on the development of proposed reduced airborne fiber limits in the United States.

1.2 Manufacturers have not achieved the July 1, 1976 2-fiber/cc limit

Members working to meet the current 5 fiber/cc limit (and the 2 fiber/cc July 1, 1976 limit) state that in areas where they have concentrated efforts--mixing, pressing, grinding--they still obtain in excess of 5 fiber/cc. Often a State or Federal OSHA inspector will check the same area within several days of the company's own sampling and in many cases will indicate the area is in compliance. While OSHA will not officially release their counts in such cases, some have privately stated they showed no fiber present in the sample. This disparity in counts has made several members very concerned that OSHA may be using these low (or "zero") counts as a basis for proposing the 0.5 fiber/cc limit, under the mistaken assumption that industry is already in or near compliance. Our members wish to emphasize that they are striving to get below the 2 fiber/cc limit by July 1, 1976 and that they are not already in compliance with the new proposals.

1.3 Epidemiology based on crocidolite asbestos is not applicable to friction materials

Crocidolite (blue) asbestos is not used in friction materials. Any epidemiological data extrapolated from sources using crocidolite, where that type asbestos is considered the significant carcinogen (mesothelioma for example), should not be used where a standard is applied to all asbestos manufacturing. This point must be emphasized as regards mesothelioma where these malignancies have been experienced at exposure levels below those causing asbestosis. If the mesothelioma evidenced at lower exposure levels is associated primarily with crocidolite asbestos, it is suggested that this evidence not be used in support of a lower exposure level for all types of asbestos.

1.4 Reliability of the membrane filter method and its use for enforcement

During industry's endeavors to comply with the existing OSHA Asbestos Regulations, fiber counts in the 2-10 fiber/cc range often have been difficult to reproduce. Skilled counters frequently obtain readings varying by much more than 0.5 fiber/cc on the same sample. Tests made at the same work station under seemingly identical conditions often will vary beyond 2 fiber/cc. (The proposed 0.5 fibers/cc standard is much less than variations routinely encountered in many existing clean work areas).

Industry appreciates that the membrane filter method is the only presently available working method for assessing airborne fiber levels in plant environments. However, the use of this method for enforcement of the 0.5 fiber/cc limit is of serious concern. Many users believe the method as currently applied by OSHA is not a reliable reproducible means of accurately quantifying airborne asbestos concentrations.

1.5 The proposed exposure levels will expand applicability of the standard to brake lining shops, car dealers, etc.

The proposed exposure limits, and the proposed ceiling concentrations in particular, would bring most garages and shops doing brake lining work, as well as their suppliers (re-builders, job shops, and the like) under requirements of this standard. In addition to the brake work done at car dealers

and the national-regional automotive service shops, brake service is offered at most garages and at many service stations. A 1972 Census of Manufacturers indicated that there are over 900,000 auto mechanics and garage workers in the United States. A 1973 analysis by Hunter Publishing Company estimated that there were over 200,000 shops doing brake service work in the United States.

Equal enforcement would mean that the regulated area, monitoring, ventilation, record-keeping and other requirements intended for manufacturers would now be required by these small businessmen.

Technical papers have been written citing studies that drilling, grinding, cutting, or other subsequent operations on brake linings can raise concentrations above the proposed limits. At the installation level, ceiling concentrations may be exceeded only a few times a day or even less often, but this still would bring many small garages under the scope of this standard. It must be assumed that all workers are to be protected equally, and we question whether OSHA took this expanded applicability of the standard into consideration during development of these proposals.

1.6 Friction materials manufacturers cannot project costs and problems with these proposed exposure levels until their new equipment and procedures are evaluated

It is difficult to segregate cost considerations from the standards section of the OSHA notice of proposed rulemaking. However, industry has embarked on a series of procedures and designs to meet the current 5 fiber/cc limit, and the forthcoming 2 fiber/cc limit. Increased costs have been incurred in many ways including dust collection and ventilation systems, bag opening machinery, special work benches, new processing methods, enclosures, etc. Normally it can not be determined whether such equipment and processing changes can meet the existing standards until after they are in place and working under full production conditions. Often there is no way of knowing whether these investments are worthless and may have to be discarded in favor of new technology that will have to be developed to achieve compliance with the new proposals. Industry needs to evaluate new equipment and methods that are now in the acquisition and implementation phases before it can begin to predict the costs of meeting these new limits, or predict whether or not these limits are in fact attainable. At this time, our industry does not know if it can meet the new limits. It will have much better information on what is feasible after completion of the programs it has already scheduled in anticipation of the July 1, 1976 effective date for the 2 fiber/cc limit.

2. REGULATED AREAS - DAILY ROSTER

Several members have indicated the requirement for a daily roster of all persons entering a regulated area will be a problem as regards enforcement, productivity, and recordkeeping. Depending on how this requirement is enforced, it could require additional guards or gatekeepers and could cause a reduction in worker productivity.

There is continued movement of lift trucks and other material handling equipment, and transfer of job orders and the like by factory personnel during the manufacture of friction materials. In addition, the areas must be serviced by machine set-up men, maintenance workers and occasionally by factory-office and engineering workers. Some areas, where there is no work

on asbestos-containing products are located adjacent to what may be regulated areas. In many cases, the work force may have to pass through the regulated area to get to and leave their work stations. For epidemiological purposes, it is recommended that an individual's personnel record be noted that he was required to enter a regulated area with a certain frequency. For example: Often--several times daily; Regularly--once or twice daily; Occasionally--about once a week; Seldom--no more than once a month. This could be up-dated on a personnel record every six months. Such a procedure would eliminate the productivity problems in enforcement of the roster requirement and would post information directly to an employee's personnel record for subsequent epidemiological study.

3. MONITORING - EMPLOYEE NOTIFICATION

It is felt that bulletin board notification of employee's exposure would serve the intent of "...shall notify each employee in writing..."

4. WORK PRACTICES

The friction materials business is under regulatory surveillance by the Department of Transportation's National Highway Traffic Safety Administration (NHTSA). An Air Brake Systems Standard (Standard 121) took effect in 1975. The Hydraulic Brake Systems Standard (Standard 105-75) took effect on January 1, 1976. Brake lining is an essential part of all brake systems, and friction materials manufacturers cannot change formulation or processing methods without considerable additional testing on their part, as well as by brake systems manufacturers and vehicle manufacturers.

For example, a major axle manufacturer projects 4,860 combinations of conditions under which a given friction material could be used in air brake systems. Based on this consideration, the manufacturer insists that a friction materials supplier must run at least 10 individual dynamometer tests under varying conditions before they can consider a particular material. This is in addition to 6-10 dynamometer tests that the friction materials supplier would run to select each candidate for submission. With current independent laboratory costs of \$2,300 for a Standard 121 dynamometer test, the certifying test costs to the friction materials supplier would be approximately \$40,000 per customer. For each additional customer 10 tests, or \$23,000 would be necessary. As for Standard 105-75, one friction materials manufacturer estimates his costs at \$25,000 for the tests necessary to certify a new product.

The costs noted are for the friction materials manufacturer's certification only, and do not include those costs required by the axle, brake, or vehicle manufacturer. The friction materials manufacturer's costs for material certification do not include pilot plant work, screening tests or other costs for developing the new product. Any significant change in processing would require additional certification tests.

Some manufacturers claim certain friction products have superior performance characteristics when manufactured using dry methods. The friction materials industry must conform to the above mentioned regulations, and is caught between forces of "more performance" on the one hand and limited options in manufacturing methods on the other. While wet manufacturing methods are recommended "insofar as practical," it should be understood

that brake lining manufacturers have additional regulatory problems that do not affect other users of asbestos.

5. RESPIRATOR PROGRAM - EMPLOYEE ROTATION

The requirements for rotation of an employee--based on examination of a physician--with the "same seniority, status, and rate of pay" could seriously affect worker assignment responsibilities of management. In many cases, labor and industry have collective bargaining agreements which contain pay differentials for night shifts, work on especially difficult tasks, work in certain areas, outdoor versus indoor assignments, etc. The newly hired employee generally starts with premiums for night differential, more difficult tasks, etc. Should re-assignment be called for, the worker normally would be moved to an area that would not command a premium, but under the proposed standard, the worker would be an exception and would receive the premium. This could cause untold difficulty with existing and future labor agreements. Such a requirement may be beyond the authority of OSHA, inasmuch as it could disrupt existing contracts.

6. MEDICAL SURVEILLANCE

6.1 Medical Surveillance--Preplacement

With the extensive data available showing that cigarette smoking causes a drastic increase in lung cancer, some members advocate that discrimination be permitted against the hiring of those smoking cigarettes in a factory using asbestos in its products. Some further advocate that an employer be permitted to require the use of respirators by those known to smoke cigarettes. Support of a non-smoker status would be permitted by affidavit or other similar requirement.

6.2 Medical Examination Requirement

The proposed rules for medical examinations for each employee exposed to airborne concentrations of asbestos fibers need clarification. Several members contend that the medical examination and exposure level should be more specific. It is generally agreed that factory workers in areas where the asbestos containing product is being processed or handled would require examinations.

Would examinations be required for the worker in areas such as the factory office, quality control, tool design or other where, for example, airborne asbestos dust concentrations might be 0.1 to 0.3 fiber/cc (TWA) and never above 2 fiber/cc ceiling concentration?

Would examinations be required for purchasing, accounting, engineering or other office personnel who work in areas with little more airborne asbestos dust than the trace amounts that might be found in a downtown office building?

Would examinations be required for factory workers, located in the same building or group of buildings where others are working on asbestos-containing products, but who are not themselves working on asbestos-containing products, and where concentrations of airborne asbestos fibers are either negligible or non-existent? For example, employees could be working on

iron castings or steel stampings in an area separate from the employees working on asbestos-containing products.

Would examinations be required for those workers who work in the clean areas above, but who on occasion enter a factory area where the full-time worker is considered exposed to airborne asbestos dust concentrations?

It is suggested that a more specific definition of the medical examination requirement based on employee exposure to asbestos would help in implementing these proposed regulations. In other words, what is the level, and how much time at this level is considered exposure to airborne asbestos dust concentrations for purposes of the medical examination requirement?

7. DANGER LABELS

The danger label normally connotes a highly toxic or poisonous material--such as cyanide or arsenic. With asbestos, the "danger" can only result if dust is created and breathed. To put the warning in proper perspective, it should be indicated that the problem exists only if airborne dust is generated. The label as proposed could cause some employees to refuse to pack, unpack, stencil, assemble or in other fashion touch finished products containing asbestos. The primary purpose of the label or sign should be to get the employee's cooperation to avoid creating dust. We suggest:

WARNING
Avoid Creating Dust
Contains Asbestos Fibers
Breathing Asbestos Dust
May Cause Serious Bodily Harm

We do not believe OSHA is out to panic employees and recommend it be positive in emphasizing "Avoid Creating Dust."

8. HOUSEKEEPING - WASTE DISPOSAL

The requirements on waste disposal appear to overlap EPA requirements, as detailed in their National Emission Standards for Hazardous Air Pollutants. We suggest that this requirement, which may infer the need for "sealed impermeable bags," be examined and re-written to maintain harmony with the EPA requirements.

9. RECORDKEEPING

The Institute supports most provisions of the recordkeeping requirements. When this data is gathered (and reviewed by objective analysts) the biological effects of asbestos exposure in friction materials factories can be determined and threshold limit values developed. In particular, we support the proposed recordkeeping requirements for (1) Exposure records, (2) Medical records, (3) Mechanical ventilation, and (4) Employee training. It is assumed such records can be stored using technology that will be available in years to come. Microfilm and EDP storage--with adequate safeguards to avoid unwarranted corrections or erasures--must be permitted. Full size hard copy records could become

a warehousing problem.

We commented earlier on the requirements for a daily roster, and recommended an alternate approach. In the event a daily roster will be required in the final regulations, we recommend the maintenance of roster records in a summary or abbreviated form as an alternate to the keeping of the daily roster record. This would serve the epidemiological purposes of the proposed recordkeeping requirements.

10. INFLATIONARY IMPACT

In discussing items of this nature, the Institute does not have access to specific cost data. That is only available from individual manufacturers. The subjects of cost impact, competition, and effects on employment are related to each other. The OSHA regulations for asbestos exposure will require considerable expenditures for equipment. In addition there will be continual additional costs of monitoring, respirator usage, medical examinations, productivity losses in use of regulated areas, recordkeeping and the like. Information on these costs must be collected from individual companies. The Institute would like to point out two items of concern to domestic manufacturers of friction materials.

10.1 There are fewer United States friction materials manufacturers in 1976 than in 1972-73

In our 1972-73 fiscal year, the Institute had 25 Active Members--those are manufacturers of brake lining or clutch facings resident in the United States. Today we have 19 Active Members. Reasons other than OSHA regulations have contributed to this decline in domestic manufacturing, but there is no question but that some manufacturers were influenced in their decisions to discontinue operations because of earlier OSHA and EPA regulations.

Some of the discontinued friction materials manufacturing operations since 1972-73 were:

Auto Specialties Mfg. Co. (St. Joseph, Michigan) discontinued automotive disc brake lining business

Johns-Manville Corp. (Waukegan, Ill.) discontinued all automotive and truck friction materials business

Scandura, Inc. (Charlotte, N. C.) discontinued all friction materials manufacturing

Silver Line Products, Inc. (Los Angeles, Cal.) discontinued all friction materials manufacturing

Standco Industries, Inc. (Houston, Texas) withdrew from industrial and truck clutch facing manufacturing

In addition, the Firestone Tire & Rubber Company discontinued production at its World Bestos Co. Division in New Castle, Indiana, with Royal

Industries subsequently taking over some of these operations. Major manufacturing operations were closed by members in Passaic, New Jersey, and Richmond, Kentucky. The only new entrant has been Hayes-Albion Corporation, with a plant in Johnson City, Tennessee, set up under a Federal Trade Commission order.

Friction materials manufacturers are a diverse group. Some will be better able to cope with the proposed regulations than others. If the trend indicated continues, it would seem logical that OSHA and EPA regulations contributed to this decline in domestic manufacturing and loss in employment.

10.2 Will stricter regulation export the jobs of American workers?

Most of our members support the principles of free trade. Some have manufacturing facilities in other countries. Others sell their products worldwide. Others have licensing agreements with foreign manufacturers. Where competition is free and un-restricted, the domestic manufacturers can compete. However, if the proposed asbestos regulations are implemented, domestic manufacturers will be working with the most restrictive exposure levels in the world. While some multi-national companies indicate that they will go to the same exposure levels worldwide, they are a minority. Except for Great Britain and the Province of Ontario, we are not aware of other jurisdictions with numerical exposure levels.

If the capital and on-going costs for compliance with the proposed regulations go significantly beyond those costs scheduled for compliance with the July 1, 1976 exposure level, brake linings, brake blocks, and clutch facings manufactured in foreign countries--without asbestos control--will be even more price competitive than now. In today's replacement market, foreign manufacturers are increasing their share of the market steadily. In a recent Labor Department notice on the application of Wagner Electric Corporation employees for worker adjustment assistance, it was stated:

Imports of automotive brake products like or directly competitive with those produced at the Plymouth Avenue St. Louis plant.....increased in value from \$46,000,000 in 1970 to \$118,000,000 in 1974. The ratio of imports to domestic consumption (I/C) and production (I/P) rose from 10.0% and 8.6% respectively to 15.3% and 13.2% respectively in 1974.

We believe that brake linings and brake blocks are in the class of products competitive with Wagner Electric Corporation's St. Louis plant. If the proposed asbestos regulations add significantly to our members' costs, they will be at a price disadvantage with manufacturers in foreign countries where asbestos regulations are either less restrictive or not in effect at all. This imbalance in international occupational regulations could end up protecting the American worker at the cost of his job. It is a problem that should be called to the attention of the regulators, the legislators, and the workers and unions who are directly involved.

* * * * *

The Institute asks for OSHA consideration of its comments and suggestions in the areas discussed. We trust also that comments received directly from friction materials manufacturers will be considered in this rule-making and we have asked our members to contribute statements for your review.

The Institute wishes to emphasize its concern on the limits for permissible exposure to airborne concentrations of asbestos fibers. Until there is sufficient medical evidence to justify reduction of the exposure limits, we ask that the limit for the 8 hour time weighted average airborne concentration of asbestos fibers be maintained at 2 fibers per cubic centimeter as due to take effect on July 1, 1976. We ask also that the ceiling concentration be maintained at 10 fibers per cubic centimeter.

If additional information is needed on any of the subjects raised by these comments, the Institute would be pleased to attempt gathering such information.

Respectfully submitted,

FRICTION MATERIALS STANDARDS INSTITUTE

E. W. Drislane
Executive Director

EWD/ed