PLAINTIFF'S EXHIBIT
G-263

ASBESTOS TEXTILE INSTITUTE

FOUNDED 1944

MEMO TO: ATI MEMBER COMPANIES & OTHER INTERESTED PARTIES

Attached hereto is your copy of the 14-page ATI POSITION PAPER mailed today, via Registered/Special Delivery, to the U.S. Department of Labor -- meeting the designated deadline established at April 9, 1976. The Paper serves as this Institute's comments to the proposal by the Occupational Safety and Health Administration to revise the Standard On "Occupational Exposure To Asbestos" (26 CFR, Part 1910, Subparagraph 1910.1001; Federal Register, Vol. 40, No. 197, October 9, 1975).

April 6, 1976 — Doris M. Fagan

Doris M. Fagan,
Executive Secretary

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ASBESTOS TEXTILE INSTITUTE, INC.

POSITION PAPER

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ASBESTOS TEXTILE INSTITUTE, INC.

FOUNDED 1944

April 6, 1975

Docket Officer, Docket H-033
U.S. Department of Labor
Room N-3620
3rd and Constitution Avenue, N.W.
Washington, D.C. 20210

RE: COMMENTS OF THE ASBESTOS TEXTILE INSTITUTE, INC., ON THE PROPOSAL BY THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION, UNITED STATES DEPARTMENT OF LABOR, TO REVISE THE STANDARD ON "OCCUPATIONAL EXPOSURE TO ASBESTOS" -- 26 CFR, PART 1910, SUBPARAGRAPH 1910.1001; FEDERAL REGISTER, VOL. 40, NO. 197, OCTOBER 9, 1975.

Dear Sir:

The ensuing statement constitutes the comments of and the position taken by the Asbestos Textile Institute, Inc., to specific revisions to the above-referenced "Occupational Exposure To Asbestos" Standard, especially as it relates to the asbestos textile manufacturing segment of the Asbestos Industry in the United States.

RISK MINIMIZATION

Prior to issuing comments to specific sections of the proposed revision, the Asbestos Textile Institute, Inc., wishes to affirm that it totally recognizes and firmly believes that all precautions

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should be exercised to preserve life, wherever and whenever possible. This Institute is committed to the belief that employers have a moral obligation to their employees to see that working conditions are as safe and as comfortable as proven technologies will allow. However it must be realized there will be a residual, unavoidable risk -- at work, at home and when at leisure. This fact is being recognized today in the United Kingdom, as promulgated in that Nation's Asbestos Regulations of 1969.

Over the years asbestos-containing products have been known specifically as safety products -- and rightly so. The number of diseases contracted and lives lost because of exposure to asbestos fibers during product manufacture is far less than the number of lives which have been saved or the number of personal injuries which have been prevented due to the use of asbestos-containing products. Product examples, to name a few, are firefighting suits, automotive brake linings, theater curtains and industrial heat protective clothing.

SPECIFIC SECTIONS OF THE PROPOSAL

Background Material

It is felt the Background Material is too vague and general to be considered soundly supportive of the need for a limitation of 0.5 fiber per cubic centimeter of air and a ceiling concentration limit of 5 fibers per cubic centimeter.

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New Evidence

Some of the New Evidence places the hazard factor on the smoking of cigarettes and not especially on exposure to asbestos. To quote directly from Section II--Toxicological Considerations of Exposure To Asbestos, Sub-Section C--The New Evidence, paragraph (2)(a), second sub-paragraph, page 47655: ". . . . non-smoking asbestos workers had few lung cancers while those who smoked had much more lung cancer than would have been expected had they not been asbestos workers."

Based on Past Conditions

We maintain that the findings cited as the reasons why OSHA proposed its revisions to the Asbestos Standard are based on work conditions as they existed 35 or more years ago. Today's plants are cleaner and safer, new engineering techniques have been implemented, and effective protective clothing and apparatus are now being used -- all of which have improved working conditions and certainly make for a brighter future insofar as employees' health and safety are concerned. We feel that insufficient consideration is being given to current, improved working conditions.

We would add that work is continuing toward developing more effective methods to reduce the hazard factor -- striving for the development of technologies that will completely eliminate any hazard to the safety and health of all employees -- and still permit industry and the Nation to enjoy a healthy economic climate.

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Method of Measurement

Although we are not opposed to using the membrane filter method, we would point out there is significant observer error when taking a reading of a membrane filter sample, as well as variance between observers of the same sample. The reading error multiplies as fiber count levels approach zero. We suggest that OSHA permit other bonafide analytical techniques in addition to the membrane filter method. It is also suggested that OSHA recognize the limitations of the membrane filter method by specifying a plus and minus tolerance. We recommend ±30%.

The Technological Feasibility Approach

It seems to us the proposed limitations are not based on scientifically-established, dose-response relationships and, therefore, the approach should be one of reaching the lowest levels that are technologically feasible.

It is our contention that the 0.5 f/cc is not now technically feasible, because: (1) an accurate, reliable method of measurement has not, as yet, been found; and (2) because in some sectors of the asbestos industry, such as in certain phases of operation in asbestos textile manufacture, the 0.5 f/cc is unattainable with today's available technology. This is not to say that, some day, solutions will not be found. Work continues and we are confident that eventually techniques will be developed and will become available that will control occupational health hazards.

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Attaining Exposure Levels

The asbestos textile industry cannot, under existing available technologies, control asbestos dust levels at 0.5 fiber/cc in all of its phases of production. This is partly due to the basic processing techniques which must be followed and still produce asbestos textile products as we know them today. In certain processes of textile manufacture the fibers are used in a dry state. Although some of these processes cannot be totally enclosed at all times (See Attachment I), fiber emissions are controlled by the best engineering techniques available.

LONG-TERM TIME FRAME

The asbestos textile industry desires to do all it can toward reducing and eliminating any health hazard to its workers. However, an extended time period would be necessary for asbestos textile producers to develop new and more effective engineering technologies toward reducing dust levels.

ARE THE LOW EXPOSURE LIMITS REALLY NECESSARY?

This Institute believes there is medical, scientific evidence which tends to support the position that the "2 fibers/cc" exposure level does present a safe level. We urge that the evidence be fully studied before reaching a final determination to reduce the exposure level to 0.5 fiber/cc.

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ECONOMIC IMPACT

One might suggest that workers could be kept from getting any exposure to asbestos fibers if all work areas at asbestos textile operations were completely enclosed, if the most effective dust control methods and exhaust systems were utilized, and if the usual rules of good housekeeping were followed. It might also be suggested that all U.S. asbestos textile producers convert to the "wet process" of manufacture, thereby reducing exposure levels. Our answer to both suggestions would be in the form of the ensuing question: Could we, particularly in the face of low-cost foreign competition, afford to follow either of these procedures in its entirety? We say we could not in the short term. A comprehensive study would have to be made toward establishing a realistic long-term time frame -- taking into account both technological and economic capabilities.

Converting to the "wet process" would entail a complete renovation at all places of operation. All existing yarn-forming equipment would have to be scrapped and all new equipment installed. But the expense would not end there. Since conventional asbestos textile products would no longer be available, many customers and fabricators would have to develop new techniques to accommodate the physical and chemical differences of products made from wet-formed yarn.

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We cannot stress enough the financial impact that would be felt in simply trying to comply with the 0.5 fiber/cc and the 5-fibers/cc ceiling concentration limits. Added to this would be the expenses that would be incurred to meet several of the other proposed revisions. For instance, it would cost some of the larger asbestos textile manufacturers close to $200,000 just to meet the proposed regulation that would require the installation of shower facilities. Coupled with this would be maintenance costs plus the continuing wage cost per employee for the non-production time that, in order to comply with the standard, would have to be allowed each worker to take the required shower.

Endeavoring to meet the proposed limitations could spell financial disaster for many of the smaller asbestos textile manufacturers and fabricators. Looking at this picture, in toto, one can easily foresee, for the industry and for the communities in which it has operations, a negative economic impact and a large increase in unemployment.

At the national level, a product price increase sufficient to absorb expenses to meet the proposed regulations would not permit the asbestos textile industry in the United States to compete in the international market. The volume of asbestos textile products imported into this country would continue to increase simply because the foreign-made products would be far less expensive than

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the same U.S.-made products. Asbestos textile imports in 1972 were 5% of reported domestic usage. In 1975 they are estimated at 35%. We point out the danger that the United States may become totally dependent on other countries to meet its domestic asbestos textile requirements.

SUBSTITUTES FOR ASBESTOS TEXTILES

There are other high-temperature textiles available but to date none of them have proven to be a totally suitable substitute for asbestos-containing textiles. For example: Glass fiber textiles do not have good insulating properties. Safety clothing made of high temperature synthetics offer good heat resistance but cannot withstand temperatures as high as that made from asbestos-containing textiles. Since asbestos textiles are the only currently-available materials suited for certain applications, this Nation cannot afford to become dependent upon imports as its sole source of supply.

HOW ASBESTOS FIBERS BECOME AIRBORNE

Attached is a complete definition of the manner in which asbestos fibers become airborne at each step in the various processes of asbestos textile manufacture. The data indicate the specific problems of the asbestos textile manufacturer in meeting existing, forthcoming and proposed levels of exposure to airborne asbestos fiber.

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Respectfully submitted,
ASBESTOS TEXTILE INSTITUTE, INC.

A. Kuzmuk

A. Kuzmuk, Chairman of the Board
of Governors & President

WHERE ASBESTOS FIBER BECOMES AIRBORNE DURING ASBESTOS TEXTILE MANUFACTURE

The following constitutes a report on the findings of a Special Environmental Task Group of the Asbestos Textile Institute, Inc., assigned the project of defining each step in the various processes of asbestos textile manufacture, and where it is difficult to keep asbestos fiber from becoming airborne. The report indicates the specific problems of the asbestos textile producer in meeting the limitations of 5 fibers, 2 fibers and 0.5 fiber per cubic centimeter of air.

A--BLENDING OR PREPARATION

Blending or Preparation is the process of mixing asbestos fibers and/or other fibers to prepare stock mixes for Carding. The machinery used to perform this operation may consist of several or all of the following: bag-opening equipment, fiber feeders, collecting conveyors, mixing pickers, fiber condensers and a variety of means of transporting the stock mixes to the carding machines.

1. Bag Opening Equipment--Asbestos fiber may become airborne as the bag is cut away from the cake of asbestos fiber, as the empty bag is asided to the disposal container and as the cake-breaker feeds the fiber forward into the hopper.

   a) The equipment is enclosed except for the face opening where bags of fiber enter. The enclosure is kept under negative pressure and the dust-laden air is exhausted to the dust collection system. Disposal of empty bags poses a problem as the employees tend to try to compact the bags and, in so doing, expose themselves to airborne asbestos.

2. Fiber Feeder & Collecting Convevor--A loosely-opened mass of fiber is moved forward by conveyor to an inclined spike apron which lifts the fiber to a point where it is dropped into a weigh pan. The weigh pan, in turn, drops the fiber onto a collecting conveyor.

   a) Asbestos fiber becomes airborne when, as the loosely-opened fiber moves on the conveyor, the fiber rolls back or is combed back from the spike apron. It also enters the air at the dropping points -- apron to pan; and pan to collecting conveyor.

   b) Feed boxes usually are enclosed and kept under negative pressure by the exhausting of dust-laden air to dust collectors. Likewise, the dust on the collecting conveyors is exhausted to the dust collection system. Also, most installations use special equipment which sprays dust-suppressing emulsions onto fibers being blended.

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Blending or Preparation--Continued

3. Mixing Picker--A unit equipped with feed rolls and a pinned cylinder; used to tumble-blend mixes of fiber.

   a) Usually these units are totally enclosed and air feed the fiber mix forward to a condenser where the fiber blend is "separated out." Again the dust-laden air is exhausted to the dust collection system.

4. Fiber Condenser & Transporting Stock Mixes to Carding Machine--Using the Fiber Condenser is the point where the fiber mix is separated from the air stream and moved forward to the card feeders. . . . The transporting of blended fiber and the carding machines are the most difficult areas of airborne fiber control. The various transportation methods used to move stock mixes to the carding machine are as follows:

   a) Open-Top Stock Boxes--Here the fiber is openly exposed and subject to becoming airborne by any extraneous air movement, i.e., in filling the box, in movement around the storage and production area, or in falling from the truck to the floor.

   b) Loosely-Bagged Fiber Transported by Manually-Moved Vehicle--Fiber may become airborne as the bags are either filled or emptied.

   c) Positive-Pressure Duct Lines--These lead directly to the card feeders and under the positive pressure, the fiber can become airborne due to a leak at any point during the process of movement.

   d) Fiber Formed Into "Batts" or "Laps"--These are used to feed the carding machines. The operation is usually done in an openly-exposed area, again subjecting the fiber to the possibility of becoming airborne.

   e) Air Locks and Duct Transportation Directly to Carding Machines--This is done under positive pressure and, therefore, the fiber can become airborne due to possible leaks in the system.

   f) Screen Condensers that Directly Feed the Carding Machines--Poses no real problems if the system is operated under negative pressure and the variety of mixes is small.

5. Reprocess Work--There is other process work that may be done near the Blending and Preparation Equipment or in a separate, nearby area.

   a) Soft Waste, Reprocess--The re-use of soft or un-twisted roving left after the production process.

      1) The soft, reworkable waste materials are gathered by manual means. Reprocessing is usually done via an opening cutter or a W-3 type picker. In this operation, asbestos fiber is subject to becoming airborne as it would in any type of rotating-cylinder or tumbling action.

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Blending or Preparation--Continued

2) The machines are enclosed as much as possible and operate under negative pressure, thereby exhausting the dust-laden air to the dust collection system.

b) Fiber Waste, Reprocess (Fly)--The collection of fiber from beneath the carding machines and the re-entry process to return the fiber to the blending or mixing stage.

1) The waste is collected by mechanical conveying methods, by vacuum systems, or manually.

2) Most of the machinery is enclosed and kept under negative pressure by the exhaust-to-dust-collection method.

6. Rope Formers, Twisters and Slubbers--Equipment used to process twisted material into heavy strands of roving or to process sliver to form rope products.

a) The rope-forming machines have large rotating parts which, when in motion, may cause fiber to become airborne because of centrifugal force or air currents.

b) The machines are usually enclosed and kept under negative pressure via an exhaust-to-dust-collection system.

7. Roving Winders--Machines used to remove roving from a "cheese package" and to wind it into a usable, marketable product.

a) Asbestos fibers may become airborne at the winder because of rotational force or as the roving is drawn from the "cheese package" because of "ballooning."

b) Winding machines usually have exhaust hoods and/or slide enclosures to control the flow of air away from the operator and into the dust collecting system.

8. Carding Machines--This equipment is a multi-complex of rotating rolls covered with teeth of fine wire. The machines are designed to comb the fiber from an unoriented mass into a planned webb of fibers in parallel plane. The machines then cut the webb into strips and the condenser section "roll rubs" each strip into a round form, with the fiber oriented in lineal direction. The material is then called roving.

a) During the webb-forming process the fiber is not under strict physical or mechanical control. Fiber is free to become airborne at practically any point in the process -- from the feeding mechanism to the spool or cheese-winding of the roving.

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Blending or Preparation--Continued

b) Airborne fiber is controlled by machine enclosure under negative pressure and is exhausted to the dust-collection system. In most operations the enclosed carding machine is further enclosed in that it is situated in a separate housing which also is controlled via the exhaust-to-dust-collection system.

B--YARN DEPARTMENT EQUIPMENT

1. Spinning Machines--This is the process whereby the twist is inserted into an oriented fiber form called roving to impart strength and to form yarn. The roving feed is at a fixed rate, fed by a set of rolls to a rapidly-rotating spindle which causes the twist to form in a lineal manner. Many forms of spinning machinery are used such as ring spinning or flyer-frame spinning. Asbestos fiber becomes airborne by centrifugal force from the rotating spindle and from the loose end whipping free when a break in the yarn occurs.

   a) Among the many means used to control airborne asbestos fiber, are: enclosed machinery with "exhaust-to-dust-collection" at every spindle; exhaust systems to collect roving when an end break occurs; dust shields with exhaust from below the spinning machine; wet process by rolls or by wetting the entire roving package; dust-suppressing sprays; and more-massive air change.

2. Twisting Machines--These combine two or more spun yarns and twist them together to add strength to the product. The machinery and the problems of fiber becoming airborne are much the same as with the spinning machines.

   a) Capture and control of airborne asbestos fiber is also similar to that used at the point of spinning.

3. Yarn Winding--The process of removing yarn from the production package and winding it into a package either for the next operation or for selling.

   a) Asbestos fiber becomes airborne at the rapidly-rotating spindles and when the yarn "balloons" between the "production package" point and the winding spindle.

   b) Capture and control of airborne fiber is by hood enclosure or dust shield with negative-pressure, exhaust-to-dust-collection. Additional control of airborne dust may be gained where possible via "wet" winding.

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C--WEAVING DEPARTMENT EQUIPMENT

1. Several types of weaving machinery are used to produce asbestos textiles.. Basically they are broad looms for cloth weaving and narrow fabric looms for tape and belt weaving.

   a) Broad Looms for Cloth Weaving--Here the warps or lineal yarns rub against each other as they are raised and lowered to form the woven pattern desired. The mechanical movement of the machine parts tends to form air currents, which, in turn, may cause fiber to become airborne.

      1) Capture and control of airborne fiber is usually by hood enclosure under negative pressure by exhaust-to-dust-collection. In weaving, many cloth products can be woven wet. Varying degrees of "wetness" are used to suppress fiber and deter it from becoming airborne.

   b) Narrow Fabric Looms for Tape and Belt Weaving--There is a wide variety of machinery in this group, from light construction to heavy-service construction.

      1) Asbestos fiber becomes airborne much the same as in the area of the broad looms for cloth weaving.

      2) Capture and control of airborne asbestos fiber is also by the same means as in cloth weaving -- local exhaust around looms and more control by wet processing.

   c) Weaving Equipment--This includes creel operations to prepare warp yarns, and various types of winding machines to prepare filling yarns.

      1) Asbestos fiber can become airborne as with any winding operation.

      2) The capture and control of airborne asbestos fiber is via negative-pressure-exhaust and by wet processing, where possible.

D--MISCELLANEOUS EQUIPMENT

1. Cloth Inspection Tables--This operation may include brushing done in an enclosed box with negative-pressure, exhaust-to-dust-collection.

2. Treating and Finishing Equipment--Most of these operations are done "wet" and the present conditions are under 2 fibers per cubic centimeter of air.

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E--HOUSEKEEPING

1. Floor Maintenance--Normally handled by treated mops, vacuum-sweeping equipment and dust-suppressing floor compounds or sprays.

2. Walls, Ceilings, Ducts and Building Structure--Some manufacturers still use "blow-down" procedures when normal production is stopped. Vacuum cleaning is the preferred method.

3. Machine Cleaning--Also done when manufacturing operation is not in process. Again, vacuum cleaning is preferred.

I N S U M M A T I O N

After a complete study of the findings from this project, it was determined that:

1. It is not possible to maintain an asbestos exposure level below 5 fibers per cubic centimeter of air at all stages of asbestos textile manufacture.

2. An exposure level of 2 fibers/cc could be maintained at most stages of asbestos textile manufacture in about five years time if funds are available to purchase, install and perfect the necessary equipment engineered according to current technical know-how.

3. We do not have the technical knowledge to meet the 0.5 fiber/cc limitation and still produce asbestos textile products as we know them today.

4. We will always have a problem safeguarding certain production employees from exposure to high levels of asbestos dust. Those maintenance personnel who repair machinery, clean dust collection equipment, and so forth, must sometimes work inside enclosed areas. Also, there are times when workers occasionally perform "unsafe" acts, impromptu, without thinking of the possible hazard. This is the human factor which is impossible to predict and difficult to control.

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