Testimony by George Perkel, Dir. of Research
Textile Workers

STATEMENT OF THE TEXTILE WORKERS UNION OF AMERICA, AFL-CIO
ON THE PROPOSED STANDARD FOR EXPOSURE TO ASBESTOS DUST
UNDER THE OCCUPATIONAL SAFETY & HEALTH ACT
FEBRUARY 11, 1972

The Occupational Safety and Health Act of 1970 requires the Secretary of Labor to promulgate standards dealing with toxic materials so that the standard "most adequately assures . . . that no employee will suffer material impairment of health or functional capacity even if such employee has regular exposure to the hazard dealt with by such standard for the period of his working life." /Section 6 (b) (5)/ We submit that the standard proposed by the Assistant Secretary for exposure to asbestos dust (Federal Register, Volume 37, No. 7, January 12, 1972) fails to fulfill the requirements of the Act.

The concentration limit proposed for an eight-hour day of 5 fibers longer than 5 microns per milliliter (time-weighted average) is far in excess of a safe limit for regular exposure to this hazard. The British Occupational Hygiene Society subcommittee report on Hygienic Standards for Chrysotile Asbestos Dust finds that a time-weighted average concentration of 100 fibers/milliliter-years would reduce the risk of developing asbestosis to less than 1 percent. This yields a limit of 2 fibers/ml averaged over a 50-year period.

This finding has been confirmed in the criteria package compiled on asbestos by the National Institute for Occupational Safety and Health of the U.S. Department of Health, Education, and Welfare. Surely there can be no justification for establishing a standard of 5 fibers/ml.

Indeed, the standard of 2 fibers does not provide a safe limit since it is based entirely on protecting exposed workers from asbestosis. In spite of the fact that there is clear evidence that workers exposed to asbestos are at risk to cancer, no data have been compiled to define the level of exposure which would reduce the cancer risk to negligible proper-

tions. (See Appendix I, Standards for Occupational Asbestos Exposure, by Dr. I.J. Selikoff and D.A. Holaday.)

The order of magnitude by which the permissible limit based on asbestosis needs to be reduced to achieve protection against the risk of cancer is indicated by the fact that in the British Asbestos Regulations the recommended limit for crocidolite asbestos (which is known to be associated with mesothelial tumors) is 0.2 fiber/cm^3 while the comparable limit for chrysotile and amosite asbestos is 2 fibers/cm^3. (See P.G. Harries, "Asbestos Dust Concentrations in Ship Repairing," Ann. Occup. Hyg., Vol. 14, 1971, p. 253.)

The association between asbestos exposure and cancer among workers in the United States has been thoroughly documented. Hammond, Selikoff and Churg have found that the number of deaths from cancer among members of the New York and Newark locals of the asbestos insulation union who were exposed to asbestos dust 20 years or longer was 3 times the expected number (i.e., deaths based upon age specific rates for U.S. white males). Deaths from cancer of the lung and pleura (the most frequent cancer observed among these workers) were 7 times the expected number. (See Table 6 in Appendix I.)

Workers exposed to asbestos dust in factories have also been found to suffer high risks of death due to cancer. Selikoff, Hammond and Churg have found that deaths from cancer among workers employed in an amosite asbestos products factory in an eastern city of the United States were 5 times the number expected while the death rate from cancer of the lung, pleura, bronchus and trachea was 11 times the expected rate. (I.J. Selikoff, E.C. Hammond, J. Churg, "Mortality Experience of Amosite Asbestos Factory Workers," presented at IVth International Pneumoconiosis Conference, ILO, Bucharest, 1971.)

In light of the evidence of association between asbestos dust

exposure and cancer it is clearly inappropriate to set a standard for asbestos based solely on the risk of asbestosis. Dr. Selikoff's studies among insulation workers in New York and Newark show that more than half of the observed deaths among the asbestos insulation workers studied between 1963 and June 30, 1971 were due to cancer. Asbestosis was responsible for 12 percent of the observed deaths.

A standard of 5 fibers per milliliter would be equivalent to a license to kill. This level of contamination is no lower than the level currently prevailing in many workplaces where workers are suffering from excessive death rates due to cancer and asbestosis.

The conclusion is inescapable that an appropriate standard for asbestos dust exposure must be directed at zero dust. This is the conclusion which two industrialists expressed at the 1964 Conference on "Biological Effects of Asbestos" at the New York Academy of Sciences:

> C.G. Addingley (British Belting and Asbestos Ltd., Cleckheaton, England): "We do not believe there is any safe limit. We have our ideas as to how low we can get and we are always striving to get right down to zero . . ."
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> John Wells (U.S. Rubber Co., Newman, Ga.): "Our own conclusion, as we began seeing what was happening in our own process, was that the only safe amount of asbestos dust exposure was zero and that the efforts in terms of achieving that lay basically in engineering, and, secondly, in education. But as far as a safe level of asbestos dust is concerned, our own conclusion in Hogansville, Ga., is that there is no safe level. The safe level is nil and anything above the safe level represents certain risk." ("Biological Effects of Asbestos," Annals of the New York Academy of Sciences, 1965, pp. 335-336.)

The engineering controls and the "educational" program needed to approach the zero level of asbestos dust should be set forth in the standard. The proposed standard does contain a number of specifications for such a program but these are too limited to constitute an effective plan of action. The "particular operations and products" listed under

paragraph (d) of Section 1910.93a should be expanded to cover all operations involved in the manufacture of asbestos products where asbestos dust may be generated.

D.W. Hills of Turner Brothers Asbestos Co., Ltd., Rochdale, England has provided a description of modern methods of asbestos textile manufacture which could form the basis of a manual of approved practices which should be part of the standard for asbestos dust exposure. The following operational procedures are illustrative:

(1) Use a ventilated booth for receiving and opening bags of asbestos fiber. Exhaust ventilation is to be applied at the dust-producing points.

(2) Treat asbestos fiber with oil emulsion in blending drum for the purpose of suppressing dust in subsequent operations.

(3) Enclose machinery used for opening and screening fiber.

(4) Use mechanical bag filling machinery to transfer fiber to bags; such bags are to be closed tightly while in transit.

(5) Apply exhaust ventilation to each dust-producing point on carding machines; maintain air speed of not less than 3,000 feet per minute in ventilation pipes.

(6) Use revolving brush fitted with exhaust ventilation in cleaning or stripping of cards..

(7) Enclose spinning frames and apply exhaust ventilation.

(8) Use damp yarns in weaving and apply exhaust ventilation.

(9) Totally enclose all conveying and handling of fiber. (Adapted from D.W. Hills, "Economics of Dust control," Annals of the New York Academy of Sciences, 1965, pp. 322-334.)

In order to implement the specifications for particular operations, it is imperative that the requirements for warning signs, monitoring, medical examinations and records be strengthened.

Warning Signs

The proposed standard requires the posting of signs at least 50 feet in each direction from the location where the hazard is present. However, no requirement is proposed for the labeling of bags or other containers. Such labeling is necessary to inform any worker handling a container that the contents are hazardous. It should contain the following warning:

DANGER

Contains asbestos.
Asbestos dust may cause asbestosis and cancer.
Container should not be opened so as to permit asbestos dust to enter the air.
Use only with adequate ventilation and approved respiratory protective devices.

Monitoring

The proposed standard provides for personal and environmental monitoring in areas "in which employees are exposed to concentrations of asbestos dust in excess of the limits specified . . ." However, no provision is made for monitoring to determine whether the specified limit is being exceeded. Without such a provision the proposed requirement is rendered meaningless.

Workers exposed to asbestos dust should have the right to know whether they are being exposed to hazardous concentrations. The employer should be required to sample the air at each operation where there is a potential exposure at least once a week. If the eight-hour time-weighted average concentration of asbestos dust exceeds the permissible level, he should be required to undertake immediate measures to comply with the stated limit. There should be no temporary provision for permissible "excursions."

The right of the employees or their representatives to observe the employer's monitoring and to have access to the records thereof should be set forth, in accordance with Section 8 (c) (3) of the Act.

The employer should be obligated to promptly notify any employee

who has been exposed to asbestos dust in concentrations which exceed the standard and should inform any employee who is being thus exposed of the corrective action being taken, in accordance with Section 8 (c) (3) of the Act.

Medical Examinations

The proposed regulation requires the employer to "provide, or make available at his cost," appropriate medical examinations to any employee exposed to asbestos dust in excess of the stated limits. The Act states that "where appropriate, any such standard shall prescribe the type and frequency of medical examinations or other tests which shall be made available, by the employer or at his cost, to employees . . ." (Section 6 (b) (7), emphasis added).

The distinction between "providing" and "making available" medical examinations is quite significant. We are opposed to giving the employer the right to provide a medical examination; he would thereby have access to the results, and could use them against the interests of the employees.

The regulation should require the employer to make available medical examinations at his cost. The results should be furnished only to the Secretary of Labor or the Secretary of Health, Education, and Welfare, and, at the request of the employee, to his physician. The employer should not have access to the results of individual medical examinations.

Records

The proposed standard requires employers to maintain records of the monitoring and medical examinations conducted pursuant to this regulation. Access to the records is required for the Secretary of Labor and, in the case of medical examinations, the records are also to be made available to the Secretary of Health, Education, and Welfare, and the employee's physician.

As noted above under Medical Examinations, we are opposed to requiring the results of individual medical examinations to be furnished to the employer. It is appropriate for such records to be maintained by the Department of Health, Education, and Welfare.

Employees or their representatives should have access to records of the monitoring required in this regulation. Section 8 (c) (3) of the Act provides for the issuance of "regulations requiring employers to maintain accurate records of employee exposure to potentially toxic materials . . . which are required to be monitored or measured under Section 6. Such regulations shall provide employees or their representatives with an opportunity to observe such monitoring or measuring, and to have access to the records thereof."

Such regulations have not been issued. It is therefore fitting that the present regulation require employee access to records of monitoring.

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