

EN-4221



E. I. DU PONT DE NEMOURS & COMPANY
WILMINGTON, DELAWARE 19893
EMPLOYEE RELATIONS DEPARTMENT

HASKELL LABORATORY
FOR
TOXICOLOGY AND INDUSTRIAL MEDICINE

on Spray Application of Asbestos

cc: Jesse Lieberman, Chief,
Occupational and Radiological
Health Section
City of Philadelphia

September 2, 1970

Robert O. Gorson,
Professor of Medical Physics
Stein Center
Thomas Jefferson University
920 Chancellor St.
Philadelphia, Pa.

Dear Professor Gorson:

In connection with my dissent to the majority opinion of the members of the Ad Hoc Committee on Spray Application of Asbestos regarding the draft report that was discussed at the Fourth Meeting on August 31, 1970, you have asked that I submit a memorandum expressing my views. I wish to comment herewith on the Specific Recommendation A: The Elimination of Spray Asbestos Material (page 7), and on the preceding paragraphs, upon which the recommendation is based.

Paragraph 5, page 4 points out that "it is difficult to ensure 100% containment of airborne asbestos material during the spraying operation."

This was established as a fact by the testimony of Dr. Boucot after visiting the site of Martin Luther King, Jr. School, and that of Mr. Wyman of General Building Contractors Association in a statement to the Committee, August 31, 1970.

It is also a fact that neither the contractors nor any public health agency has put forth the intense research effort that is required to overcome a problem such as this. Industrial hygiene engineering has succeeded in devising procedures for safely processing and using many potentially hazardous materials, such as beryllium, uranium ore, silica sand, lead, mercury, etc.

Methods for spraying asbestos-containing insulating material without emitting dangerous quantities of fibers from the site can most certainly be devised provided sufficient time and effort are expended by qualified engineering personnel.

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BETTER THINGS FOR BETTER LIVING... THROUGH CHEMISTRY

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Similarly, methods can be devised for the protection of persons spraying asbestos-containing insulating material and other persons working on the site during the spraying. An example of a precedent for the development of satisfactory safety procedures is afforded by sandblasting of metal parts in foundries, metallurgical establishments, shipyards, scrap yards, etc. It can now be done safely by using air-supplied helmets, enclosures and ventilation systems that have been developed for the purpose.

Similarly, procedures and regulations can be devised to coat the sprayed insulation material and thereby prevent erosion into air supply ducts. With respect to health protection during maintenance work, alteration of structures, or demolition of structures, the presence of sprayed-on asbestos-containing insulating material is only one part of the whole problem of dust dissemination of asbestos products. These products may be encountered as pipe insulation, as interior and exterior structural board, and in floor tiles. The elimination of sprayed-on asbestos-insulating material would not eliminate the need for an awareness of hazard and practice of safe procedures in maintenance, alteration and demolition.

CONCERN FOR FIRE PROTECTION

The use of sprayed-on asbestos-containing insulating material is intended to protect structural members of buildings from melting during accidental fires. It is intended to prevent serious or fatal collapses during the fighting of fires in office buildings, schools, hospitals, and hotels. The Committee should offer no recommendation which would interfere with or hinder adequate protection of the structure from fire. A prohibition of the use of asbestos-containing material at this time would leave as an alternative the use of a single material. Although this material was reported to the Committee to have been approved by the Underwriters' Laboratories following a series of laboratory tests of effectiveness, the fact remains that the building construction industry has not had an opportunity to use and to test it on a long-term basis with respect to its performance. This concern for adequate protection of structures in case of fire indicates that the construction industry should have some alternative in the event the substitute asbestos-free material should fail, either with respect to performance, or adequacy of supply.

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Page 6, Paragraph 9

I choose to withhold at this time an active dissent from the draft statement that "it is prudent for public health officials to assume that there is no level of concentration of airborne asbestos fibers below which adverse effects will not occur in population groups chronically exposed." There was evidence furnished to the Committee that asbestos fibers, like every other toxic agent, can be tolerated at some level greater than zero concentration without adverse response. Reference may be made to the reprint entitled "Asbestos and Health in 1969," which was furnished to the Committee members. It is by George W. Wright and appeared in the AMERICAN REVIEW OF RESPIRATORY DISEASE, Vol. 100, No. 4, pp. 467-479, October 1969. There is definitely no occasion for dissent from the statement which follows the above: "the committee endorses the consensus of many experts that every reasonable method should be exercised to limit the discharge of asbestos fibers into the environment from all sources."

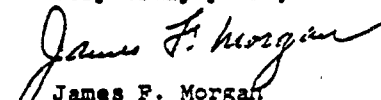
SPECIAL RECOMMENDATIONS: A. ELIMINATION OF SPRAY ASBESTOS MATERIAL

Acceptance of the statements made above would argue for the addition, following parts 1 and 2 of this recommendation, of a statement similar to the following:

"unless the prospective prime contractor will furnish to the City of Philadelphia a detailed plan of procedure, acceptable to the City, whereby emissions beyond the site will be controlled to the limits expressed in Recommendation C (2) and will give assurance that a sealant coat will be applied over the insulating material on those surfaces which are to become a part of an air supply system."

Thank you for this opportunity of adding these remarks concerning my dissent to the record.

Very truly yours,


James F. Morgan
Consultant
Industrial Hygiene

JFM/rlm

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