

July 28, 1971



MEMORANDUM FOR THE RECORD

SUBJECT: REVIEW OF UNIBESTOS AND UNIBEST DUST PRODUCING POTENTIAL TESTING AT UNIVERSITY OF CALIFORNIA (BERKELEY) ON JULY 23, 1971

Dr. H. B. Johnson and the undersigned met with Dr. J. L. (Leroy) Balzer and others on the University Staff to review progress on the subject testing program.

The test site had been changed from the Apprentice Training School of the Heat and Frost Insulators Union to one of the laboratories of the University, however, the test room and all other aspects of the test protocol used in testing unibest were identical to those used previously when unibestos and the other asbestos containing thermal pipe insulation materials were tested. The change was made at the request of the union, who felt it would not be in its best interests to continue testing in their building.

Unibest vs. unibestos results are compared in Attachment #1. In viewing this the threshold limit value for asbestos of 5 fibers per cubic centimeter of air and for mineral fiber of 10 milligrams per cubic meter of air for total dust and 5 milligrams per cubic meter of air for the respirable fraction should be kept in mind. While the unibestos asbestos in air concentrations exceeded the threshold limit value by almost 40 times ($\frac{195.0}{5}$), in hand sawing, for example, the unibest total dust in air concentrations were less than $\frac{1}{2}$ ($\frac{2.5}{5}$) of the threshold limit value and the respirable fraction dust in air concentrations were less than the threshold limit value ($\frac{2.5}{5}$) for hand sawing. Said in another way, Unibest is not only potentially less hazardous than unibestos because of the substitution of mineral fiber for asbestos but also because of a significant reduction in both total and respirable dust in air concentrations. It is anticipated that the remaining tests will continue to bear out this lower dust producing potential of Unibest.

The change from the phosphate clay binder to the silicate clay binder was discussed with Dr. Balzer. Copies of the old and new formulations were left with him.

Dr. Johnson explained the reasons for the asbestos contamination of the Unibest noted by Dr. Balzer. See Attachment #2.

It is anticipated that the Unibest testing will be completed and the test report sent to us by August 6, 1971, at which time we could meet with Dr. Lawton and Commander Barboe of BUMED, Department of the Navy. Lawton and Barboe will be attending the Helsinki Meeting described below.

The manuscript for publication of both studies (asbestos containing and non-asbestos containing) will be submitted to the Editor of either the Archives of Environmental Health or the Journal of the American Industrial Hygiene Association. Acceptance



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is anticipated by December 1, 1971, at which time pre-prints stamped "Not For Reproduction" could be obtained from Dr. Balzer or the University and used by Pittsburgh Corning to show the marked reduction of health hazard that can be accomplished by the use of Unibest.

Dr. Balzer will attend "The International Symposium on Safety and Health in Shipbuilding and Ship Repairing" in Helsinki, August 3-September 2, 1971. He will report on both studies. See Attachment #3. He anticipates meeting with Mr. John Price in Helsinki.

Dr. Balzer agreed after publication of the combined study in a scientific journal to rewrite the manuscript for publication in a trade journal, such as the Journal of the National Insulation Contractors Association.

Dr. Johnson proposed to Dr. Balzer that Pittsburgh Corning might wish him to make a presentation on the combined study to selected management personnel in Pittsburgh Corning. Dr. Johnson will look into this matter and then contact Dr. Balzer.

Dr. Balzer advised that he would be leaving the University to go with private industry early this Fall but that this would not interfere with the completion of those things discussed above.

Lee B. Grant, M.D.

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Medical Director

LBG:lc

Attachments

cc: Dr. H. B. Johnson
Dr. J. L. Balzer
Mr. J. Price
Mr. E. W. Holman
Mr. R. Gaenzle
Mr. G. Gregory
Captain G. M. Lawton

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