K. Preston - Bloomington

G. E. Devitt - Toledo

November 22, 1971

INDUSTRIAL HYGIENE SURVEY

F. Brisley - T 12
H. Janecek - Bloomington
H. Waters - Bloomington
T. Moyer - T 9

This is the summary report of the tests conducted at the Bloomington Plant on November 2 and 3, 1971 to evaluate the recently installed ventilation system for the urethane and asbestos operations.

The urethane operations appear to be under control. Emphasis should be continued on general housekeeping, as there continues to be an area wide situation of dust generated by handling the urethane material itself, especially after it has been sawed. However, a series of both personal-breathing zone samples, as well as general area samples, indicate that exposures are within applicable threshold health limits.

A number of samples were also taken in the asbestos operations. These were all personal-breathing zone samples, and covered at least one worker involved in each of the jobs of this area. The results indicate that the ventilation system is working as designed, but some problems still exist. Workers doing jobs such as trim saw operators, and sander feeders and unloaders are still being exposed at levels which indicate potential health problems, and are at or above the proposed legal standards of 5 fibers/ml greater than 5 microns in length.

Most of this exposure seems to be caused by the material handling situation in the plant. Everytime a board is picked up or loaded onto a pallet, a puff of dust and asbestos fiber is emitted, which is in the same area in which the employees are working. This is further aggravated by the double sanding passes which are often needed for product reasons. A study and recommendations by the material handling section of corporate engineering might be money well spent.

Fundamentally, there are two operations which are of immediate and definite concern. The first is the asbestos batch mixer. As long as he has to open bag of asbestos and sift through them, he will continue to be exposed to elevated levels of asbestos. This man will <u>definitely</u> have to utilize an approved type respirator while engaged in this operation, located within the equipment ventilation enclosure. Consideration should be given to relocating the actual station at which this man works to gain maximum benefit of the airflows into this enclosure, and if possible, even getting him out of the enclosure.

The second operation is the men engaged in unloading the box cars of incoming asbestos, especially the one man inside the box car itself. He must wear an approved dust respirator during this operation, and change respirator filters as often as comfort dictates. Based on the test made, I seriously doubt that any filter would last an entire day without clogging up. Although no actual tests were made on the two men stacking the bags containing asbestos, conditions would indicate that they should also use respiratory protection.

With the exception of the jobs noted above, there is no longer a need for your plant personnel to be involved in a respirator personal protection program on a mandatory basis. If some of your employees wish to continue on a voluntary basis for comfort or personal reasons, we feel this should be permitted.

If there are any questions you may have regarding this matter, please don't hesitate to contact me.

G. E. Devitt,
Chief Industrial Hygienist

/cls