



INTERNAL
CORRESPONDENCE



UNION CARBIDE CORPORATION
AGRICULTURAL PRODUCTS DIVISION

To: R. G. Hull
Division: Institute Plant
Location:
Area:

September 30, 1985

Industrial Hygiene

Copy to:
G. L. Arbaugh
B. A. Foster
R. J. Rasmussen

Gasket Storage
Building 330

Gaskets containing asbestos are stored in bins located in the south end of Building 330. Union Safety First and Health Committee members expressed concern about potential employee exposures to airborne asbestos fibers resulting from the present storage methods of these gaskets. They also suggested that gaskets containing asbestos be stored in plastic bags.

In response to the Committee's concern, the Industrial Hygiene Department performed two days of area air sampling to determine the concentrations of airborne asbestos fibers in the storage bin area. These results were reported to you under separate cover.* Briefly, no hygienically significant concentrations of airborne fibers were detected. In fact, the concentrations were less than the lower detection limit for the analytical method (i.e., < 0.3 F/cc).

In addition, samples of settled dust, which contained particles of gasket materials, were obtained from the storage bins and analyzed for asbestos content by polarized light microscopy. The microscopic analysis indicated encapsulated amosite asbestos was present in the dust samples; however, the asbestos fibers were encapsulated in a binder and were of a large particle size. No "free", respirable-size asbestos fibers were detected in the dust samples.

Asbestos fibers are a potential occupational health hazard when they are:

1. friable,
2. of a respirable size, and
3. airborne.

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The findings of the industrial hygiene investigation indicated:

1. Airborne fibers were not detected in measurable concentrations in the area of the gasket storage bins.
2. The asbestos identified in the settled dust was encapsulated in a binder and was not friable.

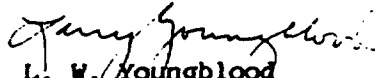
* G. L. Arbaugh to R. G. Hull dated July 15, 1985.

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3. The gasket particles containing encapsulated asbestos were too large to be respirable.

Although it generally would be considered good practice to procure and store asbestos-containing materials in sealed packages, the findings of this investigation did not indicate that such packaging methods are essential for controlling emissions of airborne asbestos fibers from these gaskets. Thus, the current method for storing gaskets containing bound asbestos is not deemed to be a significant health hazard.

Please call me if you have any questions or if I can be of assistance.


L. W. Youngblood

LWY/ck/1036k

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