

cc: K. S. Freeman
J. H. Walker H

TO: E. Maynard

May 11, 1970

FROM: Marv. Schmidt

SUBJECT: Dust Hazard Due to Sanding Joint Cement

PLAINTIFF'S
EXHIBIT
USG-361

The Joint Cement T.L.V's were based on the following considerations.

1. The undercoat calculates to about 11.2% mica, 5% asbestos and the remainder nuisance materials while the top coat calculates to 25% mica, 5% asbestos and the remainder nuisance materials. Thus the top coat represents a more hazardous material than the under coat and was used to determine the total T.L.V.
2. According to P. Kipp the asbestos TLV has been officially lowered to 5 fibers per ml greater than 5 mu in length. Inasmuch as there is no figure available for correcting this to an "impinger value" but the 1969 ACGIH publications equates 2 mppcf to 12 fibers per ml, one can assume that there will be a proportionate reduction of the impinger count to 0.8 mppcf for 5 fibers per ml.

From the above assumptions one can calculate the T.L.V. as being 10.8 m.p.p.c.f.

The samples were taken in a room in Test House C where the room was completely taped out and had no window. The air was relatively quiet. One sample holder was mounted at the left shoulder of the sander while the other was set on a tripod in a corner of the room. It took 7 minutes to completely sand all joints so the sample was collected for seven minutes at the rate of 0.1 cu ft per min. The samples were collected in Millipore filters and counted. The sample (#553) which was on the operators shoulder indicated 7.6 m.p.p.c.f. while the sample collected in the corner of the room (#554) showed 7.7 m.p.p.c.f.

According to the operator the amount of dust in the air was considerably higher, in his estimation, than normally encountered in sanding a job.

From the above, we can estimate that this joint cement, when handled in the usual way, does not present a hazard to the user.

MS:ml

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