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DOCUMENT DESCRIPTION: Letter to Charles Crook from James P. Morgan RE
Method of Reporting Asbestos Dust

cc: D. D. Drummond - Wilmington

November 25, 1969

CHARLES D. CROOK
TEXTILE FIBERS
OLD HICKORY, TENN.

METHOD OF REPORTING ASBESTOS DUST LEVELS

This is in reply to your letter of October 2, 1969, inviting comment on the proposition: "The best method to report asbestos dust level is fibers per milliliters longer than 5 microns in length."

I have reviewed your letter and the discussion which it contains and I have also reviewed a letter written by D. D. Drummond to P. J. Tracey, August 21, 1969, copies of which you and I received. I have seen the references cited in Drummond's letter and, in addition, have seen the Threshold Limit Values of airborne contaminants adopted by ACGIH for 1969 and the intended changes.

The current Threshold Limit Value for asbestos dust remains at five million particles per cubic foot of air based on impinger samples counted by light-field techniques. It is now generally recognized that this level and this method have outlived their usefulness. This is reflected in the notice of intended changes (ACGIH, 1969) in which an option is presented of using two million particles per cubic foot of air based on impinger samples counted by light-field techniques, or limit of 12 fibers greater than five microns in length per milliliter of air as determined by the membrane filter method at 430 times phase contrast magnification.

The latter method of collecting and counting is meeting with increasing favor among those who are faced with the task of evaluating asbestos dust exposures because it gives a more direct measure of the agent which needs to be controlled in order to eliminate asbestosis.

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It can be argued that a sound rationale would exist for adopting 0.5 mppcf based on impinger samples counted by light-field techniques because this would represent the application of a safety factor of four to one of the optional ACGIH levels. To go beyond this rationale, as the Construction Division has done, and utilizing a level of 0.5 mppcf as determined by the membrane filter method at 430 times phase contrast magnification is to introduce an innovation which is inconsistent with the efforts at standardization.

I concur in the proposition that our best bet at the present time would be to count asbestos particles greater than five microns in length at 430 times phase contrast magnification on samples collected by membrane filter.

ORIGINAL SIGNED BY
JAMES E. MORGAN

JAMES F. MORGAN

JFM:ljm

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