Dust Counts

BD

CONFIDENTIAL

Environmental Control Department
Research & Engineering Center
February 10, 1969

All Plant, Mill and Mine Managers
All Production Managers
All Division General Managers

Membrane Filter Technique For
Evaluating Asbestos Fiber Dust Concentrations

The Environmental Control Department is preparing to inaugurate the new procedure for measuring, analyzing and evaluating asbestos fiber dust concentrations and exposures at our plants and mines. The schedule for implementation of this program is shown later in this letter.

The new survey method is known as the membrane filter technique. The British asbestos industry has used this method for many years. It has been thoroughly tested by the United States Public Health Service and is recommended by them as the best method for evaluating asbestos fiber dust exposures. It is a truer method than our present technique for two reasons:

(1) The air being breathed by the worker is sampled as he moves about on his job.
(2) The analysis procedures are more accurate and precise.

The new sampling technique requires that the worker whose exposure is being measured wear a "personal air sampler". This sampling device consists of a small battery-powered vacuum pump, a plastic membrane filter holder (1½-in. diameter x 1-in. thick) and connecting tubing. The pump is clipped to the worker's belt or placed in a pocket. The filter holder is clipped to a lapel or collar and the plastic tubing runs between the two units. The worker will wear this sampler for a period of 1½ to 3 hours; duration being determined by the type of work he performs and the dust concentrations to which he is exposed. After conclusion of a survey, the filter holders, complete with membrane filter, are returned to an Area Industrial Hygiene Laboratory for examination by light microscopy to determine fiber concentrations.

Since this sampling technique is new and requires the full cooperation of the worker, the first step in the new program at each plant will be for our Industrial Hygienist to meet with the Plant Manager and his staff to explain the procedure and the reasons why it has been adopted. The Hygienist also will be available, if desired, to assist in explaining the new technique to the workers involved.

Each Area Industrial Hygiene Laboratory will implement this new procedure with the location shown in the schedule below. All subsequent surveys by each laboratory will use the new techniques and will be performed in accordance with our 1969 Industrial Hygiene Survey Schedule, previously issued to all locations.

(1) Eastern Area Industrial Hygiene Laboratory - Marshville - February 24, 1969.
(2) Central Area Industrial Hygiene Laboratory - Waukegan Pipe - April 21, 1969.
(3) Canadian Area Industrial Hygiene Laboratory - Reeves Mill - May , 1969.
(4) Western Area Industrial Hygiene Laboratory - Coalinga - July , 1969.

PRODUCED IN CAR - 83

Published by AsbestosClaims.Law
asbestosclaims.law/library/11373/1

C O N F I D E N T I A L

All Plant, Mill and Mine Managers
All Production Managers
All Division General Managers -2- February 10, 1969

In mixed dust exposures, involving asbestos fiber and other toxic dusts, each dust, including asbestos fiber, must be sampled separately. This is a change from previous procedure, and may increase survey time. If this results in schedule changes, each location affected will be notified separately.

This memorandum is being sent to all locations, including those without asbestos fiber exposures, so that all managers may be aware of this new sampling method.

E. M. Fenner

EMF/ems

cc: C. B. Burnett - GHQ
W. L. VanDerbeek
F. H. May - GHQ
J. B. Jobe - DHQ
A. B. Marchant - GHQ
F. J. Solon, Jr. - GHQ
H. M. Ball - GHQ
A. C. Smith
F. L. Pundsack
File
C

PRODUCED
JM - 83