FILE NAME: Kelly Moore (KM)

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AIRBORNE ASBESTOS FIBER COUNTS

for

Paco Textures Corporation
(Division of Kelly-Moore)

November 13, 1973

Personnel Present:

Mr. D. Merrill
Paco Textures Corporation

Mr. T. Fletcher
Harrisons & Crosfield (Pacific) Inc.

Samples Collected & Analyzed By:

Mr. E. J. Kleber
Union Carbide Corporation

UNION CARBIDE CORPORATION
Mining and Metals Division
Niagara Falls, New York

PLAINTIFF'S EXHIBIT
34KM

OBJECTIVES

Monitor Airborne Asbestos fiber at Paco Textures Corporation, San Carlos, California, a manufacturer of Joint Cements and Wall Textures.

OPERATION MONITORED

Personal breathing zone and environmental samples were collected October 17, 1973 during and after the addition of SG-210 to a wall texture. The bagger operator for that batch was also monitored. The required number of SG-210 bags were placed on a platform adjoining the dry powder blender. Bags were picked up, slit and dumped into the blender one by one.

EQUIPMENT AND PROCEDURE

Sampling and dust counting were carried out in accordance with OSHA Regulation 1910.93a, using the Bayer, Zummalde and Brown method for counting asbestos fibers by phase contrast microscopy (Bureau of Occupational Safety and Health, Feb. 1969).

Battery-powered air pumps (M.S.A. type) calibrated to 2 liters per minute were used to collect personal breathing zone and environmental samples on millipore membrane filters of 0.8 micron porosity.

Fiber counting was performed on a Vicker's phase contrast microscope utilizing a Porton reticle for sizing and field definition.

TEST RESULTS

Reported as fibers greater than 5 microns in length per cubic centimeter of air sampled. A fiber is defined as a material having an aspect ratio greater than 3:1.

INTERPRETATION

The O.S.H.A. regulations have been established with a limit of 5 fibers greater than 5 microns in length per cubic centimeter of air sampled on a time weighted average (TWA). The formula $\frac{C_1T_1 + C_2T_2 + C_nT_n}{\mathcal{E}T}$ describes time weighted average where C = fiber count in fibers/cc and T = time. For example the dry powder blender operator's exposure for this particular batch including bagging would be: $\frac{(3.5)\ (14) + (0.3)\ (46) + (1.0)\ (30)}{14 + 46 + 30} = \frac{92.8}{90} =$ 1.0 fibers/cc TWA.

This example should not be confused with an 8 hour time weighted average which would be based on the number of batches per day as well as times of zero and near zero exposure.

KMX 00169

SUMMARY OF FIBER COUNTS

Sample No	Field No		Description	Fiber Count Fibers/cc >5-μ
1	Z-191	Personal (14 min.)	- Operator bringing SG-210 to loading platform and adding 120 lb. to the dry powder blender.	3.5
2	A-111	Personal (46 min.)	- After addition of SG-210, during addition of other run materials, including limestone. Limestone is normally bulk-handled, but an equipment failure made it necessary to add by hand.	0.3
3	Z-236	Personal (30 min.)	- Operator bagging above batch of wall texture.	1.0
4	B-733	Environmental (58 min.)	- Four feet from charging hole 4-1/2 ft. off floor on corner of bag preparation platform. Monitored during addition of dry ingredients.	0.4
5	Z-648	Personal (11 min.)	- Same as Z-236 on a subsequent batch.	1.2