

KELLY MOORE PAINTS, INCORPORATED

San Carlos, California

ASBESTOS SURVEY

This plant was visited on November 11, 1976 to re-evaluate the effectiveness of exhaust ventilation installed on the "taping compound" bagging machine within the PACO Textures Department. Mr. Doug Merrill, General Manager, was contacted following this survey with regard to our preliminary conclusions.

CONCLUSIONS

Taping Compound
has 6% Asbestos
by weight. Much
higher than all
other products at
S.C.

1. The operator of the bagging machine for the "taping compound" is not considered exposed to excessive air concentrations of asbestos with regard to the current health standard. The exhaust ventilation that has been installed around this machine is effectively controlling this worker's exposure to asbestos dust.
2. The operator of the "taping compound" bag dumping station is not considered exposed to excessive air concentrations of asbestos with regard to the current health standard.


Edward Drake
Industrial Hygienist

3. The re-survey of the bagging and dumping operation for the "taping compound" shows workers are not exposed to air concentrations of asbestos in excess of the current health standard. However, as a pre-caution, the Medical Surveillance Program presently in effect for employees working with asbestos should be continued.


Kathryn R. Kelly, P.N.
Senior Health Consultant

ED:ke
12/15/76

DISCUSSION

There have been a number of asbestos surveys made within the PACO Textures Department since 1972. Initially, very high concentrations of asbestos were found within the plant. Consequently, there has been a successful attempt at reducing the workers' exposure to asbestos to within the current health standard through elimination of asbestos in the product, installation of exhaust ventilation, variations in work procedures, use of vacuum systems for cleaning up, etc. The bagging station for the "taping compound" was one of the last job areas where there still remains an excessive exposure to asbestos fibers. The installation of additional exhaust ventilation on this bagging machine has consequently reduced this worker's exposure to asbestos fibers to within the current health standard.

Survey Method - Air samples were collected on membrane filter papers (0.8 micron porosity). Air was pulled through them via personal sampling pumps at approximately 2 liters per minute. Air samples were collected both in the operator's breathing zone and in the general room areas directly around specific machinery. All samples were analyzed at our Hopkinton, Massachusetts laboratory using the phase contrast microscope method.

Toxicity - Asbestos has a current health standard of 2 fibers per milliliter of air. This is an eight hour time weighted value. Excessive exposure to this dust may cause a lung disease known as asbestosis and/or cancer of the chest known as mesothelioma.

Health Standard - There has been a steady reduction in the health standard for asbestos and the current standard of 2 fibers per milliliter of air became effective July 1, 1976. Health standards are guidelines to protect most workers and should not be accepted as absolute values with which all workers will be protected. Pre-existing medical conditions or an individual's susceptibility may be exceptions to this. For these reasons it is the best policy to keep air concentrations of asbestos as low as possible.

"Taping Compound" - Bagging Machine - Air samples were collected around the workers during actual bagging operations. The results of these air samples indicate what his maximum exposure to asbestos would be during the bagging operation. It should be noted that much of this worker's time may be taken up in coffee breaks, lunch, preparation time before and after bagging operations, etc. It was felt that approximately six hours per day are spent during the bagging operation and approximately two hours per day are spent in work situations where there would be little or no asbestos exposure. The approximate eight hour time weighted exposure to asbestos fibers for the "taping compound" bagger operator was felt to be less than one fiber per milliliter of air.

DATA

RESULTS OF: Asbestos in air

DATE OF SURVEY: November 11, 1976

SURVEY METHOD: Membrane filter paper

METHOD OF ANALYSIS: Phase contrast microscope

HEALTH STANDARD:

Eight Hour Time Weighted
in Fibers/Milliliter of Air

2.0

Asbestos

SAMPLE #	LOCATION	TIME OF DAY	SAMPLE TIME MINUTES	AIR VOLUME LITERS	RESULTS IN FIBERS/MILLILITER OF AIR
1	Operator's Breathing Zone (OBZ) of bagger for "taping compound". This is done approximately every other day and this operator's exposure is about six hours out of an eight hour work day.	8:00	42.5	85.0	1.3
2	OBZ of "taping compound" dumper. Dumping takes place approximately 10 to 15 minutes per batch and there are approximately eight to ten batches per day. During the other time this operator is walking around exposed to little or no asbestos fibers.	8:00	21.5	47.0	<0.4

SAMPLE #	LOCATION	TIME OF DAY	SAMPLE TIME MINUTES	AIR VOLUME LITERS	RESULTS IN FIBERS/MILLILITER OF AIR
3	General room sample taken 5' above floor, 10' behind "taping compound" bagging operation in aisle.	8:20	63.0	126.0	ND*
4	082 of operator of "taping compound" bagging machine.	9:00	63.5	127.0	0.8
5	General room sample taken 6' above floor, 10' from "taping compound" dump station adjacent to aisle.	9:00	76.0	152.0	ND
6	032 of "taping compound" dumper. This air sample counts both for time spent dumping one batch and the rest of the time other job functions which entail little or no exposure to asbestos dust.	9:00	51.5	103.0	ND

ND* - None detectable.