



COUNTY OF LOS ANGELES
HEALTH DEPARTMENT

220 NORTH BROADWAY
LOS ANGELES, CALIFORNIA 90012

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September 26, 1967

The California Zonolite Co.
5440 W. San Fernando Road
Los Angeles, California 90039

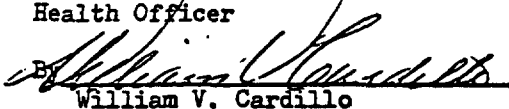
Gentlemen:

Enclosed is a copy of the report of our industrial hygiene study
at The California Zonolite Co.

If you have any questions regarding this study, please call
625-3212 extension 474.

Very truly yours,

G. A. HEIDBREder, M.D., M.P.H.
Health Officer

By 
William V. Cardillo
Head Occupational Health Services Acting

WVC:ee
enc.

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OFFICE OF COUNTY HEALTH DEPARTMENT

September 26, 1967

Report of industrial hygiene study at The California Zonolite Co.
5440 W. San Fernando Road
Los Angeles, California 90039

Study conducted by: Division of Occupational Health
County of Los Angeles Health Department
R. L. Dennerline, Industrial Hygienist
A. Medina, Industrial Hygienist
R. Kenen, Industrial Hygienist
Air & Industrial Hygiene Laboratory
Department of Public Health
State of California

Study requested by: California Department of Industrial Relations
Division of Industrial Safety

Summary:

On June 12, 1967 members of the staff of County of Los Angeles Health Department conducted an industrial hygiene study at this plant to evaluate employee exposures to dust containing asbestos, vermiculite, and gypsum. Operations studied included the mixing and bagging of mono-kote, the loading of the furnace with raw vermiculite, and #2 furnace. Non-hazardous levels of asbestos containing dust were detected by the light field method of counting dust.

General operations and sampling procedure:

A skip loader is used to load the furnace hopper with raw vermiculite, after the furnace hopper is full, the vermiculite is expanded in the furnace and either bagged, bulk loaded or used in the production of mono-kote. Gypsum and asbestos are dumped by hand and mixed together. After mixing, vermiculite is added and the total mixture is again mixed and bagged and stacked on pallets. The bagging operation is exhausted, but this system is inadequate and does not prevent the escape of the mixed dust and fibers into the atmosphere.

Atmospheric samples of dust were collected in midget impingers, with distilled water as the collecting media. All samples were either taken in the breathing zone of the worker or in the general atmosphere of the plant. The samples were analyzed for dust and fiber particles, using the standard light field technique. Additional samples of air borne mist were collected by a Staplex on filter paper and analyzed for asbestos fiber and free silica.

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Atmospheric concentration of dust detected:

<u>Sample No.</u>	<u>Location</u>	<u>% Asbestos</u>	<u>% Mica, Biotite & Vermiculite</u>	<u>*TLV in mppcf*</u>	<u>Particles of mixed dust detected in mppcf*</u>
1.	General atmosphere during operation of furnace #2	18	46	17	3.2
2.	General atmosphere loading hopper of furnace	9	75	19.0	5.1
3.	Breathing zone of operator bagging mono-kote left side	15	46	18.5	3.2
4.	Breathing zone of operator dripping gypsum and asbestos gypsum side	24	64	12.5	3.5
5.	Breathing zone of operator dripping gypsum and asbestos gypsum side	24	64	12.5	4.0
6.	Breathing zone of operator bagging mono-kote, right side	15	46	18.5	5.6
7.	Breathing zone of operator dumping asbestos and gypsum asbestos side	24	64	12.5	3.2
8.	General atmosphere in warehouse	9	75	19.0	2.8
9.	Breathing zone of operator dumping asbestos and gypsum asbestos side	24	64	12.5	3.8

*Million particles per cubic foot of air

*Threshold Limit Value

The California Zonolite Co.

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Discussion of results:

The results of the air samplings show that the TLV was not exceeded for the mixture of asbestos fiber and dust. However, at the time of the study it was observed that the existing ventilation system did not appear to be operating in accordance with Los Angeles City Ordinance. Therefore a study will be done to evaluate the existing ventilation system.

Report prepared by

Richard DennerlineRichard Dennerline
Industrial Hygienist

RD:ee