



Bell Laboratories

PLAINTIFF'S EXHIBIT

SWB-144

subject: Asbestos Evaluation -
Long Lines
440 Hamilton Avenue
White Plains, NY Building C
Case 48106-3

date April 1, 1980
from V. R. Cohen

MEMORANDUM FOR RECORD

Introduction

In addition to the environmental air sampling performed on November 7 and 8 and December 8, 1979 at 440 Hamilton Avenue, personal air samples were collected on February 7, 1980 to determine exposure to employees while performing various job tasks in hung ceilings containing asbestos. Mr. L. Williams, Long Lines Corporate Safety and Ms. V. R. Cohen of Bell Laboratories performed the sampling.

Summary

The results of personal airborne asbestos monitoring at 440 Hamilton Avenue, White Plains ranged from <.01 to .13 fibers per cubic centimeters as work period exposures.

Standards

The present standard for asbestos promulgated by the Occupational Safety and Health Administration (OSHA) is two fibers per cubic centimeter greater than five micrometers (μm) in length. This two fiber limit refers to an eight-hour time weighted average (TWA) permissible exposure limit and includes a ten fiber per cubic centimeter ceiling concentration which is not to be exceeded.

The recommended standard proposed by the National Institute for Occupational Safety and Health (NIOSH) is 0.1 fibers per cubic centimeter greater than five μm in length as an eight-hour time weighted average permissible exposure limit and a 0.5 fiber per cubic centimeter ceiling concentration.

The seven or eight-hour time weighted average exposure level at which medical examinations become mandatory is 0.1 fibers per cubic centimeter or greater (see OSHA Program Directive #300-16).

CONFIDENTIAL

003681

Sampling Techniques

Samples were collected on 37mm open faced Millipore cellulose ester filters with a 0.8µm nominal pore size diameter. Air was pulled through the filters with portable, battery powered Bendix Corporation and MSA pumps at 2.0 liters per minute.

The pumps were calibrated with the soap bubble flow-meter technique. Analysis for asbestos using phase contrast microscopy as recommended by NIOSH was performed at Bell Laboratories by Ms. V. R. Cohen.

Results and Discussion

The results of the personal and environmental monitoring data are found in Table I. The work period exposures ranged from <.01 to .13 fibers per cubic centimeter. If an employee is exposed to 0.1 fibers per cubic centimeter or greater as a 7 or 8 hour time weighted average, medical examinations become mandatory (see OSHA Program Directive #300-16).

Recommendations

To determine 7 to 8 hour time weighted average exposures to employees, further personal air sampling data should be collected during typical work operations in hung ceilings containing asbestos insulation.

MH-8685-VRC-rlh

V. R. Cohen
V. R. Cohen

Copy to
R. L. Beach - AT&T
N. J. DeCapua
J. M. Degen
R. W. Stone, MD

THIS COPY FOR

G. Barnard - LL
D. Johnson
L. Williams

D. Rainer
W. J. Schreibeis
G. M. Wilkening

CONFIDENTIAL

003682

TABLE I

Personal Samples Collected at Long Lines, 440 Hamilton Ave., White Plains, New York, February 7, 1980

<u>Name</u>	<u>Description and Activity</u>	<u>Duration (minutes)</u>	<u>Volume (liters)</u>	<u>Numbers of Fibers Detected</u>	<u>Concentration (fibers/cc)</u>
Carl DiBona SSN 058300581	Employee lounge-pulling out old electrical wire from hung ceiling, assisted from floor	111	222	25	.06
	300C S.E. corner working in mixing box above false ceiling-PE switch maintenance work	93	186	20	.05
Jim Hansen SSN 118500988	Employee lounge-pulling out old electrical wire from hung ceiling	108	205	34	.13
	300C S.E. corner working in mixing box above false ceiling-PE switch maintenance, assisted from floor	92	175	8	<.01
<u>Environmental Samples</u>					
<u>Employee lounge -</u>					
	1) In hung ceiling - work area	73	146	24	.09
	2) Employee lounge - Table	71	142	17	.05
<u>300C S.E. corner</u>					
	1) In hung ceiling - work area	80	160	10	.01
	2) On desk beneath work area	76	162	4	<.01

003683