



Bell Laboratories

PLAINTIFF'S EXHIBIT

ATT-453

subject: Asbestos Evaluation - AT&T Long Lines
440 Hamilton Ave., White Plains,
NY, Bldg. C.
Case: 48106-3

date: February 23, 1981

from: David Rainer

MEMORANDUM FOR RECORD

As part of a continuing effort by Long Lines to evaluate employee potential exposure to asbestos, personal monitoring of employees was conducted on October 25, 1980. Various job tasks requiring work above the hung ceiling were monitored.

Summary

On October 25, 1980, personal sampling was conducted at AT&T Long Lines, 440 Hamilton Ave., White Plains, NY to evaluate employee exposure to asbestos while performing various job tasks above the hung ceiling. Results of personal air monitoring indicate that employee exposure to asbestos during various job tasks ranged from .02 fibers/cc to .06 fibers/cc respectively.¹ The present Occupational Safety and Health Administration (OSHA) Standard for asbestos is 2 fibers/cc. Medical examinations are mandatory at 0.1 fibers/cc (OSHA program directive 300-16).

Recommendations

1. Employees who have occasion to work above the hung ceiling should be informed of the results contained within this report.
2. The practice of wearing respiratory protection and protective clothing should be limited to those job tasks where employees may exceed the OSHA medical monitoring standard of 0.1 fibers/cc. These job tasks include but are not limited to:
 - a. pulling out wires from above the hung ceiling, and
 - b. any job task requiring that asbestos containing insulations be physically disturbed in any manner including cutting, scrapping, shaking or sawing.

¹ The present NIOSH method for asbestos counting does not distinguish between fibrous materials, i.e., all fibers greater than 5 μ m long seen by phase contrast microscopy are counted.

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Procedure

Sampling was conducted by Mr. D. Rainer of the Bell Laboratories Environmental Health and Safety Department. Samples were collected on 37 mm open faced Millipore cellulose ester filters with portable battery powered sampling pumps manufactured by MSA. The sampling train was calibrated by using a soap bubble flow-meter.

The air filters were analyzed by the method recommended by the National Institute for Occupational Safety and Health (NIOSH). All fibers greater than 5 μ m long seen by phase contrast microscopy at 400x were counted.

Results

See table.

Discussion

Long Lines has categorized job tasks that require work above the hung ceiling (Appendix I). As part of its programs to assess asbestos exposures associated with these job tasks, personal monitoring of employees was conducted on February 7 and October 25, 1980. On October 25, 1980, job tasks sampled included fire damper inspection and maintenance, replacement of ceiling tiles, rearrangement of the master heat thermostat and replacement and rearrangement of air lines associated with mixing boxes. On this particular day, results of personal monitoring indicated no exposure in excess of the OSHA medical monitoring standard of 0.1 fibers/cc. Protective clothing with hoods and 3M 9910 respirators were worn (Figure 1).

On February 7, 1980, job tasks sampled included pulling electrical wires from hung ceilings and maintenance in mixing boxes above the hung ceiling. (V. R. Cohen Memorandum for Record 4/1/80). In this instance, results of personal monitoring slightly exceeded the OSHA medical monitoring standard during pulling of electrical wires.

Conclusion

For the vast majority of jobs requiring work above the hung ceiling, the actual amount of time spent performing a given task is small. On October 25 the longest sample period was 138 minutes, but probably less than half the time was spent in the hung ceiling. Most of the job tasks also do not require direct contact or manipulation of asbestos containing materials. As such 7-8 hour Time Weighted Averages (TWA) are low.

Periodic monitoring should continue to assess employee exposures. For the present time use of respiratory protection and protective clothing

should be limited to those jobs where it is known that asbestos levels exceed the OSHA medical monitoring level of 0.1 fiber/cc or where asbestos containing insulation is to be handled or disturbed in any manner.



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MH-78691-DR-b1a

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Results of personal monitoring for Asbestos during various job tasks while working above hung ceilings. AT&T Long Lines, Building "C", 440 Hamilton Ave., White Plains, New York October 25, 1980

Table I

Name/SSN	Sample Number	Description of Job Performed	Duration (minutes)	Volume (liters)	Number of fibers counted	Concentration (fibers/cc)	8-hour TWA
Carl DiDone 058-30-0581	10-25-80 LL01	Control Air Lines Maintenance	41	87.1	5	.04	.01
	LL05	Fire Damper Maint.	53	103.4	5	.04	
	LL07	Replacing Ceiling Tiles	71	138.5	3	.02	
	LL04	Fire Damper Maint.	138	276	6.5	.02	
Jim Hansen 118-50-0998	10-25-80 LL02	Control Air Lines Maintenance	42	84	7	.06	.02
	LL08	Rearrangement of Master Heat Thermostat	94	183.3	7	.03	
	10-25-80 LL03	Background on Desk below Control Air Lines Work	40	78	8.5	.08	
	LL09	Background on Desk below Ceiling Tile Replacement	64	124.8	6.5	.04	
	Blank				1.5		

+8 hour Time Weighted Average
The present OSHA standard is 2 fibers/cc
with Medical exams required at 0.1 fibers/cc

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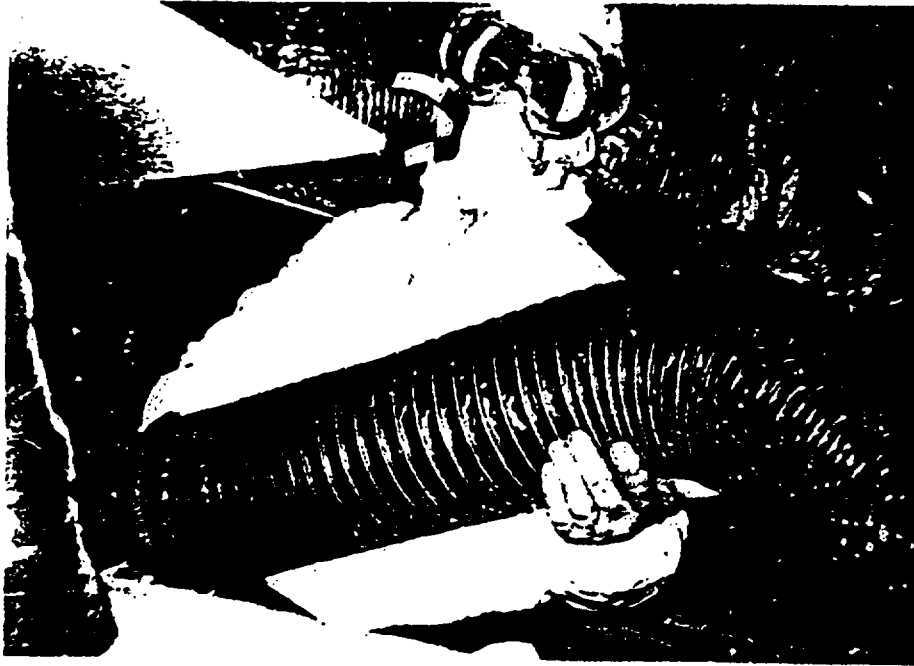


Figure 1 - Workers wore protective clothing and respirators during work above hung ceiling. AT&T Long Lines Building "C" White Plains, NY October 25, 1980

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