

PLAINTIFF'S EXHIBIT

BAB-280

ASBESTOS PRODUCTS COMPANY

3865 West 150th Street
Cleveland, Ohio 44111

July 19-21, 1972

SURVEY REPORT: 72-10
Date of Report: Aug. 25, 1972

SURVEY REQUESTED BY:

Mr. Wallace L. Grossman, President

OTHER PERSONNEL CONTACTED:

Mr. Charles L. Grossman, Jr., Vice Pres.

Mr. William Weikart, Sales Manager

Mr. Frank Patacca, Production Supervisor

SURVEY CONDUCTED BY:

Mr. P. A. Froehlich, Chemical Engineer

National Institute for Occupational Safety and Health

SUMMARY

The Industrial Hygiene Services Branch of the National Institute for Occupational Safety and Health (NIOSH) performed a survey of the Asbestos Products Company, Cleveland, Ohio during the period July 19-21, 1972 to determine the exposure of the employees to airborne asbestos fibers. Forty-four breathing zone samples were taken throughout the plant. No samples were in excess of present U.S. Department of Labor standards.

INTRODUCTION AND PURPOSE OF STUDY

Asbestos Products Company is a fabricator of personal protective clothing, including asbestos gloves, mittens, hoods, etc. Other non-asbestos containing articles such as aprons and cotton filter bags are also manufactured. The asbestos fabric used is woven from yarn composed of approximately 80% asbestos and 20% cotton fibers. Various weights and types of fabrics, mostly Underwriters grade, but some resin treated or "wet brushed" fabrics are used.

This study was conducted July 19-21, 1972 by the Industrial Hygiene Services Branch of the Division of Technical Services, NIOSH, at the request of Mr. Charles Grossman, President of Asbestos Products Company. The purpose was to determine if their operations are in compliance with the U.S. Department of Labor standard for exposure to airborne asbestos fibers.

ENVIRONMENTAL STUDY PROCEDURES AND INSTRUMENTATION

Atmospheric samples for dust count were collected on Millipore Type AA* membrane filters of 0.8 micrometer porosity encased in three piece plastic Millipore aerosol field monitors with face cap removed and filter completely exposed. The samples were taken in the operator's breathing zone using battery powered Mine Safety Appliance (MSA) gravimetric pumps, Type G. The pumps and samplers were worn by the employees. The pumps were calibrated and adjusted to operate at 2.0 liters per minute. Samples were taken for approximately one hour.

Breathing zone samples of 38 employees were taken covering a wide range of operations including sewing, layout and cutting, clicking, glove and mitten turning, sweeping, inspecting, packing and stapling. To obtain general background levels, some samples were taken where asbestos was not being processed. A total of 44 samples were taken. They are collated in Table 1.

TOXICOLOGIC AND HYGIENIC STANDARDS

Asbestos is a general name given to a variety of fibrous minerals including chrysolite, amosite, crocidolite, tremolite, anthophyllite and actinolite. Asbestosis, lung cancer, and pleural and peritoneal mesotheliomas may follow exposure to asbestos. The risk is related to the

*Registered trade name of the Millipore Corp., Bedford, Mass.

length of time of exposure and the concentration of the airborne fibers.

The Secretary of the U. S. Department of Labor promulgated standards for the exposure of employees to asbestos effective July 7, 1972*. The eight-hour time-weighted average airborne concentrations of asbestos fibers greater than five micrometers in length to which any employee may be exposed shall not exceed five fibers per cubic centimeter of air. A ceiling concentration was also defined, viz., no employee shall be exposed at any time to airborne concentrations of asbestos fibers greater than five micrometers long in excess of ten fibers per cubic centimeter.

RESULTS OF STUDY

Forty-four breathing zone samples were obtained. The asbestos fibers were counted at 400-450X (magnification) (4 millimeter objective) with phase contrast illumination by personnel at the Western Area Occupational Health Laboratory, Salt Lake City, Utah. None of the samples exceeds current U. S. Department of Labor standards for exposure to asbestos.

In general, working conditions are very good. Management has some concern over housekeeping and has been experimenting with a power vacuum sweeper for the floors. Although the operator of the floor sweeper was exposed to a higher concentration of asbestos than

*Federal Register, Vol. 37, No. 110, June 7, 1972--Title 29 Labor

the man using a push broom (1.2 vs 0.62) on the day of the survey his exposure was well below the existing standard. Employees normally work in their street clothes and merely brush their clothing with a whisk broom before leaving. It was suggested that some sort of vacuum device be made available to the employees to decontaminate their clothing.

DISCUSSION AND CONCLUSIONS

Considerable variations in the concentration of fibers determined for employees doing similar operations was observed. This is due to the freedom of the workers to move about, performing ancillary duties, and to the specific tasks assigned during the sampling periods.

Based on the data obtained during this survey, no violations of the OSHA standards for asbestos were found.

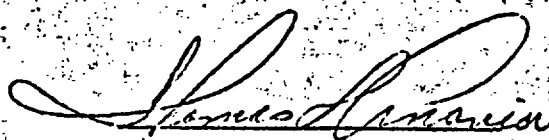
The weather was very hot and humid and most of the windows were open. Many fans were in use positioned at the workers discretion. All sewing machines were equipped with small oscillating fans which were normally directed so that the air blew across the sewing head to the sewer. Observation of smoke trails confirmed this airflow pattern. This is generally considered to be poor practice; the air should carry the dust away from the operators' breathing zones. However, fewer fibers were collected on the filters when the fans were in use. This is probably due to the oscillation of the fans which tends to scatter the

fibers over a greater area; hence lower the concentration. It would be advisable that a survey of this establishment be made in the winter when the windows are closed and fans not operating. Further, lower humidity would enhance static electricity build-up which might increase the number of airborne particles.

RECOMMENDATIONS

None: the results of this survey indicate that the facilities of Asbestos Products comply with U.S. Department of Labor standards for asbestos.

REPORT APPROVED BY:



REPORT PREPARED BY:

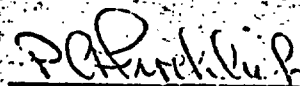


TABLE 1
Concentration of Asbestos Fibers in Breathing Zones of Employees of
Asbestos Products Company

Position	Sample No.	Concentration*	Time of Survey	Remarks**
Layout & Cutting	128	0.8	7/19 pm	
	138	0.2	7/20 pm	cutting wet asbestos
	3967	0.6	7/20 pm	
	Average	0.5		
Clicking	129	0.4	7/19 pm	
	148	0.4	7/20 am	
	147	0.2	7/20 pm	
	110	0.3	7/21 am	
	Average	0.3		
Sewing	127	0.1	7/19 pm	
	131	0.9	7/19 pm	
	132	0.4	7/19 pm	
	137	0.8	7/20 am	fan off
	142	2.4	7/20 am	fan off
	143	0.4	7/20 am	fan off
	144	1.2	7/20 am	fan off - sewing t
	100	0.1	7/20 am	sewing cotton
	107	0.2	7/20 am	
	145	0.5	7/20 am	closing (cuffs)
	3973	0.4	7/20 am	
	112	0.9	7/20 pm	
	113	0.3	7/20 pm	
	105	0.3	7/21 am	
	106	0.6	7/21 am	
	108	0.2	7/21 am	
	111	0.5	7/21 am	linings
	3976	0.2	7/21 am	wet asbestos
	Average	0.6		

*No. of fibers greater than 5 micrometers long per cubic centimeter of air.

**Unless otherwise noted nearby, fans were in operation.

TABLE 1

**Concentration of Asbestos Fibers in Breathing Zones of Employees of
Asbestos Products Company**

Position	Sample No.	Concentration*	Time of Survey	Remarks**
Turning	130	2.1	7/19 pm	
	134	0.8	7/19 pm	
	135	0.8	7/19 pm	thumb turning
	149	3.3	7/20 am	fan off
	150	2.5	7/20 am	fan off
	146	0.8	7/20 am	
	101	0.6	7/20 pm	
	3969	0.3	7/21 am	thumb turning
	3970	0.6	7/21 am	
	Average	1.3		
Stapling	136	0.1	7/20 am	cottons and leather
Inspection	126	0.6	7/19 pm	
	141	0.4	7/20 am	fan off
	102	0.2	7/21 am	
	109	0.1	7/20 am	metallized asbestos jackets
	Average	0.3		
Packing and Shipping	114	0.2	7/20 pm	
Sweeping	140	0.5	7/19 pm	
	104	0.6	7/20 pm	
	103	1.2	7/20 pm	vacuuming floors
	Average	0.8		
Supervision	133	0.3	7/19 pm	

*No. of fibers greater than 5 micrometers long per cubic centimeter of air.

**Unless otherwise noted nearby, fans were in operation.



STATE OF OHIO
THE INDUSTRIAL COMMISSION OF OHIO
DIVISION OF SAFETY AND HYGIENE
2325 WEST FIFTH AVENUE
P.O. BOX 1745
COLUMBUS, OHIO 43216

PHONE (614) 466-3385

Industrial Commission
GREGORY J. STEBBINS
Chairman
MARGUERITE M. NEAL
Vice Chairman
JOHN E. SENN
Member

JAMES A. RHODES
Governor

Division of Safety and Hygiene
WILLIAM C. MURPHY
Superintendent

SEP 23 1975

Mr. Frank Patacca
Plant Manager A-Best Products Co.
3865 West 150th Street
Cleveland, Ohio 44111

Risk# 133909

Dear Sir:

On June 10, 1975, a visit was made to the plant of A-best Products Company, 3865 West 150th Street, Cleveland, Ohio, 44111, to check conditions under which the employees are working. There are approximately 73 employees at this location.

This company manufactures safety clothing.

Breathing zone air samples for asbestos dust were obtained with personal sampling pumps and .8 micron pore size mixed cellulose ester filters. The sampling rate was two liters per minute.

The sample results were found to be under the TLV or Threshold Limit Value on this date. The present TLV for an 8-hour time-weighted average concentration of asbestos fibers to which any employee may be exposed shall not exceed 5 fibers, longer than 5 micrometers, per cubic centimeter of air, and no employee shall be exposed at any time to airborne concentrations of asbestos fibers in excess of 10 fibers, longer than 5 micrometers, per cubic centimeter of air. Air sample results are as follows:

<u>OPERATION</u>	<u>EMPLOYEE EXPOSURE, TWA*</u>	<u>TLV</u>
Turning Thumbs	1.4 fibers/cc	5 fibers/cc
Glove Turning	0.15 fibers/cc	5 fibers/cc
Thumb Installer	0.73 fibers/cc	5 fibers/cc

*TWA = Time-Weighted Average

None of the employees sampled were found to exceed the ceiling value of 10 fibers/cc.

Since the employees were not rotated as usual, the air sample results, at least for the Turning Thumbs operation, should be lower than found.

The TLV's are used as guides in the control of health hazards and should not be used as fine lines between safe and dangerous concentrations.

Should your firm require further assistance regarding industrial hygiene or safety, please feel free to contact this Division.

Sincerely yours,

Ronald J. Sherman
Ronald J. Sherman

A-Best Products Company

Cleveland, Ohio 44111

January 15, 1976

The Babcock & Wilcox Company,
Power Generation Group,
91 Sterling Ave.,
Barberton, Ohio. 44203

Attention: R. C. Monter, Buyer.

Gentlemen:

Following our conversation of yesterday with regards to safety hazards, we are enclosing two copies of the survey report conducted by the Industrial Hygiene Services Branch of the National Institute for Occupational Safety & Health at our plant IN july, 1972. We are also enclosing the reports covering the findings from the State of Ohio Industrial Commission on a June 10, 1975 inspection of our plant.

After studying the report, you will see that A-Best Products Company was found to be under minimum limits set by the U. S. Department of Labor Standards for exposure to air-borne asbestos fibers. No violation of the OSHA standard for asbestos was found.

Following the enactment of the Occupational Safety Hazrds Act, the asbestos textile mills have been emproving their methods of weaving cloth in order to hold down the lint. They currently are using the "wet weaving" method with success.

Since we are fabricators of asbestos, and we meet OSHA requirements, there should be little reason to believe your use of asbestos gloves would be hazardous. However, if you have any doubt, it might be helpful to have air samples studies at your operation.

We trust this information will be of some assistance to you.

Very truly yours,

A-BEST PRODUCTS COMPANY,

Wallace L. Grossman
Wallace L. Grossman.

WLG:EK
enc.

000178



DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
PUBLIC HEALTH SERVICE
HEALTH SERVICES AND MENTAL HEALTH ADMINISTRATION
August 29, 1972

NATIONAL INSTITUTE FOR OCCUPATIONAL
SAFETY AND HEALTH
514 Post-Office Building
Cincinnati, Ohio 45202

Mr. Wallace Grossman, President
Asbestos Products Company
3865 West 150th Street
Cleveland, Ohio 44111

Dear Mr. Grossman:

Enclosed is a report of the asbestos survey of the Asbestos Products Company conducted by the National Institute for Occupational Safety and Health.

All of the samples taken during this survey were in compliance with U.S. Department of Labor standards. I wish to thank you, and especially Mr. Patacca for the cooperation and assistance extended to me.

We are currently investigating the suitability of the "Economy Down-stroke Baler" for use in the compaction of asbestos scraps and will provide an opinion shortly.

If we can be of further assistance, please contact us at your convenience.

Sincerely yours,

Phillip A. Froehlich
Chemical Engineer
Industrial Hygiene Services Branch
Division of Technical Services

Enclosure