FILE NAME: Baldwin (BALD)

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DOCUMENT DESCRIPTION: Inspection Report - Asbestos Survey Conducted at Clark Equipment Co. on Oct 3, 1974

October 24, 1974

Clark Equipment Company
1046 South Main Street
Lima, Ohio 45804

Risk # S.I. 3034

Gentlemen:

A survey for asbestos was conducted at Clark Equipment Company, 1046 South Main Street, Lima, Ohio, 45804, on October 3, 1974.

The survey stemmed from a request by Mr. Earl Dundor, Plant Safety Manager because the union was concerned about a brake and clutch operation using asbestos.

Upon arriving at the plant, the following people were contacted:

(1) Earl Dundor, Plant Safety Manager
(2) Dan Stirk, Foreman of ban pool
(3) Richard Foreman, General Foreman
(4) Richard Lyle, Chairman U.A.W., Local 106
1440 Bellefontaine Ave., Lima, Ohio 45804
(5) Dennis Mault, Vice-Chairman, U.A.W., Local 106

The plant has a total population of 1700, 1400 production, and 8 employees at the ban pool, the operation in question.

The operation in question, involves the assembling of an asbestos piece onto steel bands for brake and clutch activity. The asbestos is riveted onto the bands, instead of by a bonding compound. The operation involves the cutting of the asbestos to size by a band saw, the countersinking of holes into the asbestos by drills for attachment to the bands, and the infrequent grinding of the asbestos with a bench grinder.

The following observations were made prior to and during the asbestos survey:

Neither the band saw, nor the drills used to work the asbestos had a local exhaust ventilation system. The bench grinder had a system that collected the dust at the source of emission, however the dust was exhausted into a drum located approximately 3 feet

behind the grinder. The drills had a continous flow air nozzle position to blow the emitted dust away from employee's breathing zone, however, the two drills used were opposite each other, and when both air nozzles were in operation the opposing forces would cause a swirling pattern dispensing the dust in all directions. Around the areas of these machines, settled dust from the asbestos pieces was noted. The riveting operation emitted less dust than the other operations.

Four employees were selected by the writer to sample. These employees in a normal day's operation would be in contact with the asbestos representing a typical exposure of employees.

The survey was conducted using a MSA Model G Personal Sampling pump with 37 millimeter AA (.8 micron porosity size filter). Enclosed is an open faced cassette. The sampling rate used was 2 liters per minute. (This method is recognized by the Occupational Safety and Health Administration and the National Institute of Occupational Safety and Health).

The analytical method was that fibers were counted at 400-450 manification using phase contrast illumination with sample mounted in high viscosity solution of membrane filter material.

The four employees sampled, their job descriptions, and length of employment at this operation areas follows:

Name of Employee	Job Description	Length of Employment at Operation
(1) Philip Little	Band Saw Operator and Assembler	7 months
(2) Kelly Puckett	Drill Press Operator	3 years
(3) Bob Bunsaker	Rivet lining to steelbond, also operated band saw and drill press	2 months
(4) Louis Hollar	Drill Press Operator	-25 years

The results of the survey are as follows:

Employee	Field Sample Nos.	Asbestos Count Fibers/cc	TLV(asbestos)
Philip Little band saw operator and assembler	56079-CL-1	0.28 fibers/cc	5 fibers/cc
	56079-CL-2	0.60 fiber/cc	
	56079-CL-10	0.09 fibers/cc	

The average fiber count through the sampling period for Philip Little is - 33 fibers per cc, which is below the 8 hour time weighted average for 5 fibers/ cc asbestos.

(2) Employee	Field Sample Nos.	Asbestos count fiber/cc	8 hr TLV
Kelly Puckett	56079-CL-2	0.21 fiber/cc	5 fibers/cc
Drill Press	56079-CL-5	0.34 fiber/cc	" "
Operator	56079-CL-8	1.18 fiber/cc	" "
	56079-CL-12	0.33 fiber/cc	" "
	56079-CL-13	0.73 fiber/cc	" "

The average fiber count through the sampling period for Kelly Puckett is 0.56 fiber/cc, which is below the 8 hour time weighted average of 5 fiber/cc asbestos.

(3) Employee	Field Sample Nos.	Asbestos count fiber/cc	8 hr TLV
Bob Emmsaker	56079-CL-3	.39 fiber/cc	5 fibers/cc
Rivet lining	56079-CL-6	1.10 fiber/cc	"
to steel and	56079-CL-9	0.16 fiber/cc	"
band saw and drill press operator			

The average fiber count through the sampling period for Bob Emmsaker is 0.55 fiber/cc which is below the 8 hour Time Weighted Average of 5 fibers/cc asbestos.

(4) Employee	Field Sample Nos.	Asbestos count fiber/cc	8 hr TLV
Louis Hollar	56079-CL-4	0.16 fiber/cc	5 fibers/cc
Drill Press-	56079-CL-11	0.14 fiber/cc	" "
man			

The average fiber count through the sampling period for Louis Hollar is 0.15 fiber/cc, which is below the 8 hour Time Weighted Average of 5 fibers/cc asbestos.

Based on the results obtained was the fiber counts do not exceed the Threshold Limit Value for asbestos at the time of this survey. However, the samples taken represent conditions only at the time of the survey and do not necessarily represent the conditions that prevail at all times.

I should be noted that after July 1, 1976, the 8 Hour Time Weighted Average for asbestos fibers will be reduced from 5 fiber/cc to 1 fibers/cc as prescribed in the code of The Federal Register, Department of Labor, OSHA, 29 CFR 1910.93a (b)(2). With this in mind, the writer respectfully submits the following recommendations:

Your attention is invited to the Section on asbestos found in the code of the Federal Register, Department of Labor, OSHA, Occupational Safety and Health Standards, 1910.93a Asbestos, found in the 1974 edition on pages 23543-23545.

For consideration of the following:

(A) Local exhaust ventilation:
Local exhaust ventilation installation at the band saw operation, and drill presses, with a collection system (bag collector) outside the plant set up in such a way as not to contaminate the outside air.

(B) Environmental monitoring:
A program of air sampling should conduct samplings from within the breathing zone of any employee working with asbestos on membrane fillers of 0.8 micrometerporosity mounted in an open face filter holder to insure the 8 hour Time Weighted Average for airborn asbestos fiber are within the prescribed standard.

(C) Housekeeping:
All externalsurfaces in all places when asbestos is used should be maintained free of accumulation and the waste should be disposed of properly.

(D) Preplacement , annual and termination of employment physical examination should be provided to all employees involved with handling and machining asbestos and that the records be kept to be made available to all interested parties.

Though the company was within the standards set for asbestos on the date of the survey, the institution of the above mentioned recommendation may further insure a safe and healthful work place.

If the Division can be of any help in the future, feel free to contact us.

Sincerely yours,

Dale Belchan
Industrial Hygienist

DS:bjs