

FILE NAME: Caterpillar (CAT)

DATE: 1982 Jan 12

DOC#: CAT058

DOCUMENT DESCRIPTION: Memo RE Exposures During Parts Handling at
Delavan Warehouse

**CATERPILLAR TRACTOR CO.**

PEORIA

DATE January 12, 1982

PLANT OR
OFFICE Morton

DEPT. Safety

ATTN. W. E. Mastronardi

PLANT OR OFFICE	DEPARTMENT	ATTENTION	
☐ DESTROY		FILE UNTIL (DATE)	

cc: C. Carter - Morton
 B. Ghelardini - Delavan
 R. R. Hoffman - AB3B
 M. T. Neu, M.D. - Morton
 H. K. Thompson - AB1D
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C O N F I D E N T I A L

Personal exposure and general air samples (taken at Delavan on November 30 and December 1, 1981) have been analyzed for asbestiform fiber content.

The personal samples were taken on employee, Arthur Watkins during the handling of Part No. 4B3534 and subsequent assembly of Group No. 4B3533. On November 30, 1981, 200 pieces were assembled. Approximately 211 pieces were assembled on December 1, 1981. On both days general air samples were taken at a location about six feet to the left or right of the work station.

Notable amounts of loose material were found in most boxes which contained Part No. 4B3534. Analysis of this material showed the presence of chrysotile asbestos at a level of less than five percent. Cellulose was also found in this sample of loose material.

Employee Watkins' fiber exposure, on an 8-hour time weighted basis, was 0.5 fibers per cubic centimeter of air on November 30 and 0.2 fibers per cubic centimeter on December 1. As noted previously residue collected from boxes of parts contained cellulose fibers; therefore, one may speculate that some fraction of the fibers counted were cellulose and not asbestos. I believe however, that we are obliged to consider that the fibers were asbestos and thus implement work practices and/or control measures accordingly.

The OSHA asbestos standard (1910.1001) requires that employers provide certain medical examinations for exposed employees. OSHA has established an exposure level of 0.1 fibers per cubic centimeter of air (8 hour time weighted average) as the point at which medical



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surveillance is triggered. You will note that employee Watkins on both days had an exposure that exceeded the 0.1 fiber level. Per requirements of 1910.1001 this employee should be placed in a medical surveillance program. Since we have no past exposure data for this employee I believe we should assume that past exposure may have been near the same level as measured recently.

In the future, potential exposure may be significantly reduced (i.e. to a level below 0.1 fiber per cubic centimeter of air) by vacuuming parts and loose material from boxes prior to handling and assembly. Only acceptable vacuum cleaners should be used. The collected material could then be sealed and labeled for proper disposal per requirements of the asbestos standard. Industrial Hygiene G.O. can offer guidance in vacuum cleaner selection.

The potential asbestos fiber exposure should be remeasured at this job when work is next planned.

A tabulation of all exposure data is presented in the attached table.

Please call if you have any questions.

REKinser
Industrial Hygiene Engineer
ABSL/C - Ext. 5315
jw

R. E. Kinser

Attach.