

FILE NAME: Ford (FD)

DATE: 1980-1982

DOC#: FD146

DOCUMENT DESCRIPTION: Internal Inspection Reports



*file
replace*

Inter Office

Personnel and Organization Staff

May 7, 1980

Mr. J. D. Whyte, Manager
Kentucky Truck Plant

Subject: Industrial Hygiene Survey, Asbestos Fibers

The attached report describing an industrial hygiene survey at the Kentucky Truck Plant gives a recommendation for medical surveillance of employees exposed to asbestos fibers. Implementation of this recommendation is essential to:

- . Assure conservation of employee health
- . Adhere to Company directives regarding occupational health issues
- . Comply with OSHA regulations
- . Meet UAW contractual agreements regarding employee health and safety

Additionally, in accordance with Ford industrial hygiene policy, efforts should be made to find acceptable substitute materials to replace asbestos components of the brake and clutch assemblies.

Your response to me by May 30, 1980 with a plan including a timetable to implement these recommendations will be appreciated.

Paul E. Toth, Manager
Industrial Hygiene & Toxicology Department
Employee Health Services

Attachment
jb

cc A. H. Greer

PRODUCED BY FORD

012785



Inter Office

Personnel and Organization Staff

May 7, 1980

Mr. J. D. Whyte, Manager
Kentucky Truck Plant

cc C. E. Allen, Jr., M. D. A. H. Greer
J. G. Henry
P. Resch

Subject: Industrial Hygiene Survey -- Asbestos Fibers

At the request of P. Resch, an industrial hygiene survey was performed at the Kentucky Truck Plant. The purpose was to quantify exposures of employees who handle asbestos-containing materials, as stated in OSHA 1910.1001.

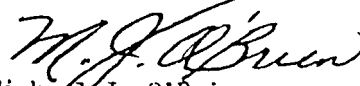
The air sampling results, shown in the attached table, indicate that affected employee exposures do not exceed the OSHA permissible exposure limit (PEL) of 2 fibers per cubic centimeter of breathing zone air (f/cc). However, the exposures of the employees in the following job positions exceed 0.1 f/cc, which is the Ford guideline for requirement of annual medical examinations (refer to D. L. Block's letter to Division Industrial Relations Manager, et. al, re: "Medical Monitoring--Asbestos Exposure dated May 2, 1978).

- . Brake Tightener (AA-2)
- . Clutch Plate Assembler (B-5)

Based on the above results, it is recommended that all employees performing the above tasks be given annual physical examinations which include as a minimum: a chest roentgenogram (posterior-anterior 14 x 17 inches x-ray), a medical history to elicit symptoms of respiratory disease, and pulmonary function tests to include forced vital capacity (FVC) and forced expiratory volume at one second (FEV_{1.0}).

In addition, attempts should be made to find acceptable substitute materials for the asbestos components of the brake and clutch assemblies.

If there are any questions contact the writer at 33-78955.


Michael J. O'Brien
Senior Industrial Hygienist
Industrial Hygiene and Toxicology Department
Employee Health Services

Attachment
pp

PRODUCED BY FORD

012786

INDUSTRIAL HYGIENE SERVICES SECTION
INDUSTRIAL HYGIENE AND TOXICOLOGY DEPARTMENT
EMPLOYEE HEALTH SERVICES

KENTUCKY TRUCK PLANT

Asbestos Use Areas

March 13, 1980

PERMISSIBLE OCCUPATIONAL EXPOSURE LIMIT TO AIRBORNE CONTAMINANTS
(f/cc = fibers per cubic centimeter of breathing zone air)

<u>Contaminant</u>	<u>8-Hour Time Weighted Average Exposure Limit</u>
Asbestos	2 f/cc

RESULTS

<u>Employee Name/ Social Security No.</u>	<u>Job Position (Column Number)</u>	<u>Airborne Asbestos Concentration (f/cc)</u>
I. <u>Department 64</u>		
B. G. Bennett 401-70-3491	Brake Installer (J-6)	0.03
B. G. Bennett 401-70-3491	Brake Installer (J-6)	0.05
	Time-Weighted Average	<u>0.04</u>
R. B. Leffler 311-46-1036	Brake Set-Up (K-7)	0.01
R. B. Leffler 311-46-1036	Brake Set-Up (K-7)	0.13
	Time-Weighted Average	<u>0.07</u>
R. C. Carroll 404-74-9915	Brake Tightener (AA-2)	0.08
R. C. Carroll 404-74-9915	Brake Tightener (AA-2)	0.14
	Time-Weighted Average	<u>0.11*</u>
E. W. Brown 407-50-5158	Brake Line-Up (BB-3)	0.06
E. W. Brown 407-50-5158	Brake Line-Up (BB-3)	0.01
	Time-Weighted Average	<u>0.04</u>
II. <u>Department 73</u>		
C. R. White 402-64-2572	Starter Cable Assembler (B-8)	0.07
C. R. White 402-64-2572	Starter Cable Assembler (B-8)	0.03
	Time Weighted Average	<u>0.05</u>

PRODUCED BY FORD

012787

<u>Employee Name/ Social Security No.</u>	<u>Job Position (Column Number)</u>	<u>Airborne Asbestos Concentration (f/cc)</u>
III. <u>Department 74</u>		
G. W. Muncy 312-62-6273	Clutch Plate Assembler (B-5)	0.40
G. W. Muncy 312-62-6273	Clutch Plate Assembler (B-5)	0.49
	Time-Weighted Average	<u>0.45*</u>

* Exceeds Ford guidelines requiring annual medical monitoring

DATA RETRIEVAL NUMBERS: MJO 1863-1865; MJO 1867-1870; MJO 1872-1874; MJO 1877;
MJO 1879

Analyses performed by L. LaTorre using phase contrast microscopy

FORD MOTOR COMPANY
Industrial Hygiene & Toxicology Laboratory
Accredited & Certified By:
American Industrial Hygiene Association

PRODUCED BY FORD

012788



FILE

Inter Office

Personnel and Organization Staff

March 18, 1982

Mr. J. D. Whyte, Manager
Kentucky Truck Plant

cc C. E. Allen, Jr., M.D.
D. Dyer
J. G. Henry

Subject: Industrial Hygiene Re-Study - Asbestos Fiber Exposures

Reference: Industrial Hygiene Study - Asbestos Fibers, M. J. O'Brien to
J. D. Whyte, April 9, 1980

Along with first quarter lead monitoring conducted March 2-3, 1982, additional sampling at the request of Mr. D. Dyer, Safety Engineer, was performed of employee exposures to airborne asbestos fibers. The purpose was to re-study asbestos-use areas and quantify exposures of those employees who routinely handle asbestos-containing materials, per OSHA regulation 29 CFR 1910.1001. Only asbestos results are detailed in this report. Lead exposures will be reported at a later date.

FINDINGS

Asbestos fiber exposures at Kentucky Truck Plant are confined to assembly areas where new brake linings and clutch plates are installed. In some instances, the installation of these parts involves an abrading action that can potentially generate airborne fibers. Mainly, employee breathing zones can be contaminated by the release of fibers that have accumulated in the shipping cartons used for part storage. The extent of employee exposure to asbestos is dependent on many factors including personal work practices and the amount of dust in these cartons.

Results from this study, as shown on the attached table, demonstrate the presence of airborne fibers within the employee breathing zones but at airborne concentrations, 1) below the OSHA permissible occupational exposure limit (PEL) of 2 fibers, longer than 5 μ m, per cubic centimeter of breathing zone air (f/cc) and, 2) below the medical action level of 0.1 f/cc.

RECOMMENDATIONS

Based on the above results, no additional employees require the annual medical examination at this time as specified in Dr. D. L. Block's letter to Divisional Industrial Relations Managers, et.al., (Medical Monitoring - Asbestos Exposures, May 2, 1978). However, those employees who were identified in the April, 1980 Industrial Hygiene study as exposed to asbestos fibers in excess of the medical action level, must continue to receive annual medical examination. This is Company policy when dealing with asbestos, a known carcinogen, in which no safe limit or threshold of exposure is known and an employee exposure exceeds 0.1 f/cc.

PRODUCED BY FORD

012789

Mr. J. D. Whyte
March 18, 1982
Page Two

In addition, the following is recommended:

- Minimize employee exposure with routine vacuuming of shipping cartons and other areas of potential dust build-up of asbestos-containing material.
- Insist supplier vacuum loose dust and fibers from parts and boxes before sealing and shipment. Request supplier to investigate coating inside of shipping boxes with an adhesive (spray or sticky paper lining) to trap non-adherent asbestos fibers released from parts during shipment. (This was successful for clutch plates at Livonia Transmission Plant. Raybestos was supplier of clutch plates wrapped in sticky paper.)
- Vacuum operator will require monitoring and prior to monitoring, personal protective equipment during disposal.
- Proper disposal methods are required such as collecting waste material in impermeable, clearly labeled bags.
- If any changes in the present operation occur that may impact on employee exposures such as rate increase, etc., additional sampling should be performed.

Alan R. Amberg

Alan R. Amberg
Industrial Hygienist
Industrial Hygiene and Toxicology Dept.
Employee Health Services

dt

attachment

PRODUCED BY FORD

012790

INDUSTRIAL HYGIENE SERVICES SECTION
INDUSTRIAL HYGIENE AND TOXICOLOGY DEPARTMENT
EMPLOYEE HEALTH SERVICES

Kentucky Truck Plant
Asbestos Use Areas

March 2-3, 1982

PERMISSIBLE OCCUPATIONAL EXPOSURE LIMIT TO AIRBORNE CONTAMINANTS

(f/cc = fibers per cubic centimeter of breathing zone air)

<u>Contaminants</u>	<u>Action Level</u>	<u>8-Hour Time-Weighted Average Exposure Limit</u>
Asbestos	0.1 f/cc	2 f/cc

RESULTS

<u>Employee Name</u> <u>S.S. Number</u>	<u>Job Position</u> <u>(Column Number)</u>	<u>Date</u>	<u>Airborne Fiber Concentration</u> <u>Time-Weighted Average (f/cc)</u>
<u>Department 62 - Front End Axle</u>			
J. Renfrow 310-46-7144	Brake Tightener (AA-2)	3/2/82	0.02
M. E. Hibbs 407-60-0975	Hub Hanger (AA-2)	3/2/82	N.D.
<u>Department 64 - Rear End Axle</u>			
R. Leffler 311-46-1036	Brake Set-Up (K-7)	3/2/82	0.007
J. Richert 306-56-1773	Brake Tightener (K-6)	3/2/82	0.01
<u>Department 74 - Diesel Engine Line</u>			
H. Robinson, Jr. 315-44-7073	Clutch Plate Assembler (B-4)	3/2/82 3/3/82	0.08 0.02

N.D. = None Detected at 0.004 fibers/cc

PRODUCED BY FORD

DATA RETRIEVAL NUMBERS: ARA 172-176, 183

INSTRUMENTATION: Bendix BDx-55 sampling pump with 0.8 μ m open-face AA filters

ANALYSIS: Fiber Microscopy performed by L. Latorre, Senior Industrial Hygienist

FORD MOTOR COMPANY
Industrial Hygiene & Toxicology Laboratory
Accredited & Certified By:
American Industrial Hygiene Association

012791