FILE NAME: Ford (FD)

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DOCUMENT DESCRIPTION: Memo RE Evaluation of Asbestos Worker Exposure, Brake Research Unit with Attached Data

Intra Company

February 20, 1970

Mr. J. A. Keller, Supervisor
Personnel Services Department
Research and Engineering Center

Subject: Evaluation of Asbestos Worker Exposure, Brake Research Unit, Scientific Building

As requested, an industrial hygiene study was conducted to evaluate worker exposure to asbestos dust in the Brake Research Unit located at the Scientific Building, Research and Engineering Center. The results of the air samples taken are contained on the attached data sheet.

The operations carried on in the Brake Research Unit include the weighing and compounding of dry asbestos and cutting, filing, and abrasion wear testing of the compounded asbestos brake lining material. These operations are of an intermittent nature and are carried out in four separate rooms. Only one of these rooms is equipped with process exhaust ventilation, while the other rooms have normal building general ventilation. Although local exhaust is present in the room where weighing and compounding are carried on, it is not being utilized for the operation.

The air samples taken were evaluated considering the present threshold limit value of five mppcf and the lower level of two mppcf listed by the American Conference of Governmental Industrial Hygienists as an intended change of the TLV for asbestos dust. As can be seen from the data, all samples are within acceptable limits.

Because of the apprehension exhibited by the employes toward their exposure to asbestos, it is our opinion that modification which involve little or no expense are justified. These modifications include moving the balance in the weighing and compounding room to an area where existing flexible local exhaust ducts could be placed proximal to the balance while weighing. This same procedure could also be used for the mixer used in compounding. The last modification would consist of cleaning the work bench used in the cutting and filing operation with a vacuum cleaner rather than blowing it clean with an air hose.

If there are any questions, or if we can be of further assistance, please do not hesitate to contact us.

Henry B. Lick
Industrial Hygienist

cc R. M. Quarles
R. L. Watling, M.D.

Attachment

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February 10, 1970

Data Sheet

Research and Engineering Center

Scientific Building

Asbestos Dust Concentrations

Location	Airborne Asbestos Dust Concentration in Million Particles per Cubic Foot of Air
Threshold Limit Value	5.0
Change of Threshold Limit Value scheduled for 1971.	2.0
1. Brake Research Area, Compounding Operation. Worker's Breathing Zone - Air Sample	0.6
2. Brake Research Area, Cutting and Filing Operation - Worker's Breathing Zone - Air Sample	1.3
3. Brake Research Area, Wear Testing. General Room Air Sample	0.7

Instrumentation: Mine Safety Appliances Monitaire Pumps with Midget Impinger.

Analysis: Light Field Count Technique

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