DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
PUBLIC HEALTH SERVICE

NATIONAL CENTER FOR
URBAN AND INDUSTRIAL HEALTH
1014 BROADWAY
CINCINNATI, OHIO 45202

Ack.

January 17, 1968

REFER TO:

Dr. D. E. Hickish
Industrial Hygiene Specialist
Ford Motor Company Ltd.
Warley, Brentwood, Essex, England

Dear Dr. Hickish:

Mr. Ayer has asked me to reply to your letter on brake lining decomposition.

The enclosed draft of a report on brake decomposition summarizes some of the early work we have done on this subject. Further work has generally confirmed the conclusion that brake linings give off very few free fibers except under extreme operating conditions.

With regard to the cleaning of brake assemblies in service garages, electron micrographs of the dust removed from brake drums has shown it to contain mostly road dirt and rust with very few fibers. What fibers were released by the lining have apparently escaped into the air. However, some other service garage operations, such as radius grinding and burnishing, which abrade the brake surface, will produce dust clouds containing free fibers similar to those found in brake lining manufacturing plants. To evaluate these situations I would recommend fiber counts on membrane filter samples as described in the attached preprint by Edwards and Lynch. The British Occupational Hygiene Society has adopted a limit of 2 fibers/cc longer than 5 μ.

Some other articles which may be of interest are also enclosed. Please let me know if I can be of any further assistance.

Sincerely yours,

Jeremiah R. Lynch

Jeremiah R. Lynch
Asst. Chief, Environmental Activities
Field Studies
Occupational Health Program

22 JAN 1968

Enclosures

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