Inter Office

Personnel and Organization Staff

Mr. S. F. Svoboda
Supplier Liaison Engineer
Rotunda Evaluation
Service Research Center
Ford Customer Service Division

July 5, 1974

Subject: Asbestos Fiber Emission from Rotunda Vacuum AARE-705-475

As requested, we evaluated asbestos fiber emissions from Rotunda Vacuum Cleaner Model AARE-705-475 fitted with a prototype disposal waste bag. Results are attached.

This vacuum cleaner is essentially the same as other Rotunda Vacuum Cleaner Models we have evaluated for use in cleaning asbestos laden brake lining dust. The only real difference is a prototype paper disposal waste bag. The idea of the disposal bag is a good one which should eliminate the problem cleaning the vacuum after use. Unfortunately, the bag in the vacuum supplied to us ruptured just before completion of our tests. However, the problem appears to be easy to correct. It should be noted that a label stating the asbestos hazard must be affixed to the bag. This label is found in subparagraph g and h of the October 18, 1972 Federal Register 1910.93a, pages 22143 and 22144, which are attached.

The current OSHA Threshold Limit Value TLV for airborne asbestos fiber is five fibers greater than five microns in length per milliliter of air, with a downward revision to two fibers greater than five microns in length per milliliter scheduled for July 1, 1976. As can be seen from the attached data sheet, all of the air samples taken were within the current OSHA TLV for asbestos. If the vacuum we evaluated is typical of the Model AARE-705-475, this model should be acceptable from a fiber emission standpoint for use in the cleaning of dust from brake or clutch assemblies.

Henry B. Lick

Henry B. Lick
Senior Industrial Hygienist
Ford/Philco-Ford

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Attachment

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SCF-FORD-1199

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Data Sheet

Rotunda Vacuum Cleaner Model AMC 705-475

June 13, 1974

Asbestos Emission

Remarks	Concentration of Fibers Greater Than 5 Microns in Length per Milliliter of Air
Eight-hour Occupational Safety and Health Act Threshold Limit Value	5
" " " " " " " " " "	2
Effective July 1, 1976	
Sample No. 1 - Breathing zone while vacuuming	1.4
" " 2 - General room air sample	0.8
" " 3 - " " " "	0.4
" " 4 - " " " "	0.4

Note: Room size 880 ft^3 - Samples taken equidistant from vacuum cleaner.

Instrumentation: MSA Model G Pumps and Millipore Membrane Type AA 37 mm filter.

Analysis: 430X Phase Microscopy by Kettering Laboratories, University of Cincinnati Medical Center

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