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E. I. DU PONT DE NEMOURS & COMPANY

FABRICS & FINISHES DEPARTMENT

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Marshall R & D Laboratory
April 4, 1973

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65-LINE PREPARAKOTE
SANDING DUST

Attached is a summary of the experiments I performed to determine the amo of airborne asbestos in sanding dust from 65-Line Preparakote.

The level, in general, is within 1976 OSHA standards for asbestos (2 fibers/ longer than 5 microns - time weighted average). Unanswered still are:

- The amount of encapsulated asbestos in the respirable dust
- The effect of the encapsulated asbestos on the lung tissue.

I do not know how to determine the amount encapsulated - one guess - would put the maxim as the proportion of talc and asbestos in the paint solids. However, the amount is going to b less than that since we do not count fibers less than 5 microns in length and a significant part of the respirable dust would be less than 5 microns in diameter.

If we can be of further help, please contact me.

TJN:jp
4/4/73
ATTACH.

PROCESS CHEMISTRY SECTION
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SUMMARY SANDING SAMPLES

#1 - Taken at refinish training center while operator sanding fender.

Asbestos - 2.3 fibers/ml* (7 fibers/100 fields)

#2 - Taken while sanding panels laying flat on bench top. Filter was 6 inches to the side and 2 inches up from bench. 80% of dust particles flowed below filter.

Asbestos - 1.6 fibers/ml. (2 fibers/50 fields)

#3 - Taken while sanding on bench top. Filter 3-4 inches above sander.

Asbestos - 3.2 fibers/ml* (3 fibers/50 fields)

*NOTE: 1976 OSHA limit is 2 fibers/ml., in sample #1 - 6 hours sanding at this level would meet the 2 fiber limit and #3 - 5 hours. Sample #3 was probably higher in dust than operator would receive since the sample was close to source. In both cases - sanding for longer than 5 hours would be unlikely in a refinish shop.