



DOW CHEMICAL U.S.A.

PLAINTIFF'S EXHIBIT

DOW-2665

TEXAS DIVISION
FREEPORT, TEXAS 77541

ENVIRONMENTAL HEALTH REPORT

AIRBORNE ASBESTOS SURVEY B-1040

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CHECKED R. L. Daniel

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Summary

A survey for airborne asbestos was made in the B-1040 area. This is an operation that purifies crude asbestos. All analysis were below the levels required for the asbestos standard established by the Occupational Safety and Health Act, (OSHA).

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Distribution

H. R. Schewter B-1029
F. W. Spillers B-2224
* H. H. McClure B-1210
R. E. Flake B-101
H. H. Hoyle 1707 Bldg. Midland
* F. D. Axe - Pittsburg
* C. E. Caldwell - OCD
* R. R. Langner 607 Bldg. - Midland

* C. L. Sercu - Cleveland
* B. G. Vaughn - Plaquemine
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INTRODUCTION

OSHA requires that occupational exposure to airborne asbestos dust be controlled so that no worker is exposed to more than 5.0 asbestos fibers per cubic centimeter of air based on a count of fibers greater than 5 micrometers in length. These are determined as a time-weighted average (TWA) exposure for an eight hour work day, and no peak concentrations of asbestos more than 10.0 fibers per cubic centimeter as determined by a minimum sampling time of 15 minutes. This survey evaluated the airborne asbestos during the purification process at B-1040.

METHODOLOGY

The operation procedure for mixing asbestos was observed and two stationary points were selected for monitoring, (Fig. 1). A third sample was taken by having the mixer wear a monitor during the mixing operation. Sample point two was an area on the platform where the dry asbestos is stacked just before mixing. Sample point one is on the mixing tank. The mixer carried the bags from the crude asbestos area, placed them on a platform near sample point one. He then opened the bags and dumped them near sample point two. During the operation the test subject wore a Scott-Acme respirator as a routine safety procedure.

Airborne samples were then taken using the MSA portable pump (Mine Safety Appliance Co., Pittsburgh, Pa., Model 92814). The asbestos was collected by pulling air through a millipore filter. Flow rate for the pump was one liter per minute and the sample time was one hour. All analysis were done by Lee Martin B-1218.

DISCUSSION

Sample 1 shows 0.9 fibers per cubic centimeter and sample 2 has only 0.2. The personnel monitor showed 2.6 fibers per cubic centimeter. These measurements are all below OSHA's present requirements, but not below those that become effective July of 1976 which reduces the number of fibers per cubic centimeter from five to two.

CONCLUSIONS

Airborne asbestos measured during this survey was below the current Threshold Limit Values (TLV).

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RECOMMENDATIONS

Even though the concentrations of asbestos measured were below the TLV, care should always be used in handling the material.

Attached is a list of OSHA requirements that may be of help to you.

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