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DOW CHEMICAL U.S.A.

TEXAS DIVISION
FREEPORT, TEXAS 77541

ENVIRONMENTAL HEALTH REPORT

AIRBORNE ASBESTOS SURVEY B-1020
(REMOVAL OF ASBESTOS TANK COVERING)FILE NO. B10-322DATE March 22, 1974AUTHOR H. N. EdwardsCHECKED P. L. DanielDATE 3/27/74

Summary

A survey for airborne asbestos was made in the B-1020 area during the removal of coverings from two tanks. Results indicate that levels were below the Threshold Limit Values (TLV) based on a time-weighted average (TWA) established by the Occupational Safety and Health Act (OSHA).

ST0015119

Distribution

P. B. Jacobsen B-3501
J. E. Capps B-1022
*W. H. Fletcher B-101
R. E. Flake B-101
H. R. Hoyle 1707 Bldg.-Midland
*F. D. Axe - Pittsburg
*C. E. Caldwell - OCD
*R. R. Langner - 607 Bldg.-Midland

* C. L. Sercu- Cleveland
* R. G. Vaughn - Plaquemine
✓ File (2)

AN OPERATING UNIT OF THE DOW CHEMICAL COMPANY

ST0015120

METHODOLOGY (continued)

This was the entire work time required for removal and clean-up. All analyses were done by Lee Martin B-1218.

RESULTS

Table I shows the levels obtained for each hour at each location sampled. The time-weighted average (TWA) is also shown. Although there were times when the concentration exceeded 5 fibers per cubic centimeter, none of the areas exceed the TLV based on the TWA.

DISCUSSION

Some of these high concentrations could have been avoided had the entire area been wetted before any work began. The outer layer could have been removed wet, placed in bags and then lowered to ground level. Another possible help would be to cover the second level grating around the removal area. This would keep the loose material from falling through the grating to the ground level.

CONCLUSIONS

Airborne asbestos levels during this operation did not exceed OSHA requirements based on the TWA of 8 hours. Even though these levels were within the limits, it is noted that proper protective clothing was worn.

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.

EHS
HNE/bbs
3-22-74

TABLE I

ASBESTOS FIBERS GREATER THAN 5 MICROMETERS

PER CUBIC CENTIMETER OF AIR

LOCATION	PREWORK	1ST HOUR	2ND HOUR	LUNCH HOUR	4TH HOUR	TWA
1	<0.1	<0.1	4.3	0.3	1.9	0.80
2	<0.1	1.8	8.4	0.6	4.1	1.86
3	<0.1	0.4	0.2	<0.1	5.6	0.80

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OSHA REQUIREMENTS
FOR HANDLING AIRBORNE ASBESTOS

10. Asbestos waste and scrap shall be collected and disposed of in sealed bags or other containers.
11. All clean up of asbestos dust shall be performed by vacuum cleaners or wet cleaning method. No dry sweeping shall be performed.

ST0015122

EHS
HNE/bbs
3-12-74
