PLAINTIFF'S EXHIBIT
DOW-788

DOW CHEMICAL U.S.A.

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FILE: B12-3062 Contractor Appendix Date: August 19, 1988

EVALUATION OF ASBESTOS LEVELS DURING REMOVAL IN THE APB AIR HANDLER ROOMS

Brevard Company employees have been included in an Industrial Hygiene Survey conducted by Dow Texas Operations Industrial Hygiene Department. The results of this survey as it pertains to your employees is attached. It is your responsibility to inform your employees of the monitoring results along with the conclusions and recommendations.

If you are not the correct person to receive this information, or if the address is incorrect, please contact Dee Barrow, telephone number 238-1281.

Industrial Hygiene Services
Texas Operations

ST0015258

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INDUSTRIAL HYGIENE REPORT
TEXAS OPERATIONS

DOW CHEMICAL U.S.A.
AN OPERATING UNIT OF THE DOW CHEMICAL COMPANY

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TITLE:

ASBESTOS MONITORING DURING REMOVAL AT A. P. BEUTEL BUILDING, MAJOR UNIT DEMOLITION, APB

AUTHOR(S)
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REVIEWER(S)
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SUMMARY

Asbestos monitoring was done during the removal of asbestos containing insulation from some piping associated with the air handlers in the mechanical rooms at the A. P. Beutel Building (APB).

Area concentrations were less than the acceptable exposure limit of 2 fibers/cc. Potential contractor time-weighted average (TWA) exposures could not be calculated because one filter was overloaded with dust and fibers and one filter was torn during monitoring.

All personnel within the restricted area used respiratory protection and disposable coveralls.

The results of this survey have been furnished to Brevard Company, the contractor for this job.

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INTRODUCTION

Asbestos monitoring was performed during the removal of asbestos containing insulation from pipes associated with the air handlers at APB on January 3, 1987. Personal breathing zone samples and area samples were collected to determine potential exposures to asbestos and potential contamination of the area after the job was completed. The asbestos removal was done by Brevard Company and the monitoring was done by Donna Hicks, Joe Emmitte and Linda Bullard.

CONCLUSIONS AND RECOMMENDATIONS

Potential contractor eight-hour TWA exposures to asbestos could not be calculated because one sample was overloaded with dust and fibers and one filter was torn during monitoring. However, the four-hour samples collected were 0.11 and 0.12 fibers/cc. At the time of the survey, the Industrial Hygiene Guide was 2 fibers/cc.

Area concentrations of asbestos before and during the removal operation ranged from less than 0.01 to 0.09 fibers/cc.

All area measurements taken after the removal showed no significant airborne concentrations (<0.01 fibers/cc).

Brevard Company, the contractor for this job has been furnished with the results of this survey.

RESULTS AND DISCUSSION

Table I shows the results of the personnel and area monitoring. Personal exposures were considered potential exposures since respiratory protection and disposable coveralls were used during the asbestos removal. All monitoring results were below the acceptable guideline for airborne asbestos of 2 fibers/cc.

METHODOLOGY

Asbestos samples were collected using calibrated Gilian HFS 113A and 513A air sampling pumps. A known volume of air was pulled through 25mm cellulose ester membrane filters, 0.8um pore size. Samples were collected at a flow rate of approximately 2 liters per minute. The samples were counted by McKee Environmental Health Services using phase contrast microscopy. NIOSH Method 7400 was used.

EVALUATION CRITERIA

The evaluation of exposure levels was based on the following criterion:

	OSHA PEL
Asbestos	2 fibers/cc

The OSHA Permissible Exposure Limit (PEL) is the time-weighted average concentration for a normal 8-hour workday, 40-hour work week, to which nearly all workers may be repeatedly exposed without adverse health effects.

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