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 BRAKE REPAIRS AT GARAGES, A-901 AND B-203, DECEMBER, 1987 - APRIL, 1988.**

PLAINTIFF'S EXHIBIT
DOW-760

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SUMMARY

Personal and area asbestos monitoring was done during brake maintenance jobs at A-901 and B-203 Garages in December, 1987 through April, 1988. Monitoring was conducted for Contractor Mechanic personnel.

All measured asbestos concentrations were well below the OSHA STEL of 1.0 fiber per cubic centimeter (30 minute period) for contractor employees performing the short term jobs. The highest potential personnel measurement was 0.37 fiber per cubic centimeter, for the fifteen minute job. This calculated to an eight hour time weighted average exposure of 0.01 fibers per cubic centimeter. The measured area concentrations were less than 0.01, well below the OSHA permissible exposure level (PEL) of 0.2 fiber per cubic centimeter for an eight hour time weighted average.

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ASBESTOS MONITORING DURING BRAKE REPAIRS AT GARAGES, A-901 AND B-203, DECEMBER, 1987 - APRIL, 1988

INTRODUCTION

Personal and area monitoring for asbestos was done during brake repairs at the Plant A and Plant B garages from December, 1987 through April, 1988. The purpose of this report is only to summarize the data since the exposure measurements were collected by another industrial hygienist.

CONCLUSIONS AND RECOMMENDATIONS

Based on the results obtained during monitoring in December, 1987 through April, 1988, Contractor Mechanics are not being overexposed to asbestos during brake maintenance jobs.

The approved guidelines for asbestos handling and removal operations are stated in the "Texas Operations Asbestos Handbook." The asbestos handling procedures must be reviewed, understood, and enforced by all personnel involved in the asbestos removal jobs. All Contractor Mechanics that perform short-term jobs involving asbestos or asbestos containing materials should be informed of the results of this survey.

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RESULTS AND DISCUSSION

Table I shows the results of personnel and area monitoring during short-term brake maintenance jobs at the garages, A-901 and B-203. The highest potential personnel measurement was 0.37 fiber per cubic centimeter, for the fifteen minute job. This calculated to an eight hour time weighted average exposure of 0.01 fiber per cubic centimeter. Results showed that measured short-term concentrations were well below the OSHA STEL of 1.0 fiber per cubic centimeter for a thirty minute period.

EVALUALTION CRITERIA

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

AGENT	EXPOSURE GUIDELINE	SOURCE**
Asbestos	0.2 fiber/cc (8-Hr.TWA)	OSHA (PEL)
	1.0 fiber/cc (30 minute)	OSHA (STEL)

** OSHA (PEL) Occupational Safety and Health Administration, Permissible Exposure Level

OSHA (STEL) Occupational Safety and Health Administration, Short Term Exposure Limit

The OSHA (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. The OSHA (STEL) is the excursion limit averaged over a thirty minute period.

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TABLE I

ASBESTOS MONITORING AT GARAGES A & B

SAMPLE DATE	SS NUMBER	SAMPLE TIME(min)	SAMPLE NUMBER	CONCENTRATION (fiber/cc)
3-3-88	466-21-1654	18	GA-1	<0.01
3-10-88	455-35-7372	10	GA-2	0.06
1-12-88	455-35-7372	15	GA-3	0.37
1-12-88	455-35-7372	30	GA-4	0.11
1-13-88	455-35-7372	15	GA-5	<0.01
1-13-88	455-35-7372	15	GA-6	0.04
1-13-88	455-35-7372	30	GA-7	<0.01
4-8-88	332-32-0615	115	GB-1	<0.01
3-25-88	(AREA SAMPLE)	435	GB-2	<0.01
3-25-88	(AREA SAMPLE)	435	GB-3	<0.01
12-9-87	332-32-0615	180	GB-4	<0.01
12-9-87	332-32-0615	180	GB-5	<0.01
12-14-87	332-32-0615	60	GB-6	<0.01
12-10-88	462-31-8810	90	GB-7	0.01
12-10-87	462-31-8810	90	GB-8	0.06
	OSHA STEL (30 MIN)			**1.0**

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