



DOW-CHEMICAL U.S.A.

PLAINTIFF'S EXHIBIT

DOW-818

TEXAS DIVISION
FREEPORT, TEXAS 77541

ENVIRONMENTAL HEALTH REPORT

AIRBORNE ASBESTOS
PERSONNEL MONITORING
CHLORINE 6
BUILDING A-5024

FILE NO. A50-1686

DATE November 22, 1978

AUTHOR H. N. Edwards

CHECKED R. L. Gwinn

DATE November 22, 1978

Summary

None of the 99 samples analyzed for airborne asbestos was above the required level of 2.0 fibers/cc. It is therefore concluded that employees are not being overexposed to asbestos within the Chlorine 6 area.

It is recommended that each employee be made aware of the results found, the hazards of overexposure and the necessity for keeping these levels below the prescribed limit. This informing should be documented.

ST0015664

bbs

Distribution

D. E. Billings A-5024
R. E. Flake B-101
O. N. Hollis A-1201
✓ T. J. Loftus A-5024
✓ File

L. W. Rampy 1803 Midland
R. R. Langner 1603 Midland
Marlene Swank 1803 Midland
D. J. Roberts 2020 Midland
* F. D. Axe - Pittsburg
* C. E. Halphen - Plaquemine
* R. J. McCormick - Strongsville
* Neil Murray - Sarnia
* R. D. Olson 607 Midland
* S. A. Goode - OCD

November 22, 1978

INTRODUCTION

The Occupational Safety and Health Act (OSHA) requires that occupational exposures to airborne asbestos be controlled so that no worker is exposed to more than 2.0 asbestos fibers per cubic centimeter of air based on a count of fibers greater than 5 micrometers in length. These are determined by 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.

It is now proposed to lower the limit to 0.5 fibers per cubic centimeter with a peak of 5.0 fibers.

This survey was conducted at Chlorine 6 to evaluate the worker exposures by personnel monitoring. The tests were taken from 9-15-78 to 10-18-78.

METHODOLOGY

Airborne samples were collected using a Bendix Permissible air sampling pump (Bendix Corp., Baltimore, Md.). The fibers were collected by pulling air through a Millipore filter (AAWGO3700) mounted in a Millipore disposable cassette. Flow rates for the pumps were calibrated at 1100 cubic centimeters per minute and sampling times were three hours. All samples were collected by E. A. Engling and D. E. Lewis of Chlorine 6.

Samples were analyzed by Central Laboratory using the following technique:

Four marked squares are cut from a filter about half-way from the edge to the center. This section is then placed on a drop of clearing solution¹ and placed on a microscope slide. The sample is covered with a cover slip and allowed to clear (about 15 minutes). The sample count is made on a Reichert Zetopan Optical microscope using Normarski interference contrast at 500 magnification. Counts are made for particles greater than 5.0 microns, and reported as fibers per filter square.

RESULTS

Results of the airborne sample analyses are shown in Table I. All levels are below the required limits.

CONCLUSIONS

Workmen are not being overexposed to asbestos within the Chlorine 6 area.

¹
Clearing solution: 0.1 g/ml of clean Millipore filter paper in 1:1 diethyloxalate: dimethylphthalate.

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RECOMMENDATIONS

It is recommended that each workman be made aware of the results found, the hazards of overexposure, and the necessity for keeping these levels below the prescribed limits. This informing should be documented.

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EHS
HNE/bbs
11-22-78

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TABLE 1
AIRBORNE ASBESTOS CHLORINE VI
FIBERS/CC > 5 uM
JOB CLASSIFICATION

NAME	MASTER NO.	JOB CLASSIFICATION	DATE	FIBERS/CC
1. D. E. Billings	132154	Production Supt.	9-28-78	< 0.1
2. T. H. Canady	132970	Asst. Prod. Supt.	9-28-78	< 0.1
3. T. R. Horner	138154	Sr. Prod. Engr.	9-29-78	< 0.1
4. G. E. Rademacher	506930	Research Engr.	10-4-78	< 0.1
5. T. J. Loftus, Jr.	417288	Prod. Engr.	10-4-78	< 0.1
6. K. L. Johnson	138576	Engineer	9-26-78	< 0.1
7. C. M. Warren	113835	Prod. Foreman	10-3-78	< 0.1
8. S. R. Brown	131719	Foreman	9-28-78	< 0.1
9. W. L. English	137945	Foreman	10-5-78	< 0.1
10. W. M. Gaubatz	104582	Foreman	10-19-78	< 0.1
11. K. E. Guffey	115399	Foreman	9-25-78	< 0.1
12. A. L. Hobbs	134255	Foreman	9-12-78	< 0.1
13. H. Solis	135084	Foreman	10-2-78	< 0.1
14. G. S. Bengé	119051	Rot. Shift Foreman	10-19-78	< 0.1
15. G. P. Crofton	137536	Rot. Shift Foreman	9-27-78	0.2
16. C. S. Dalmolin	119459	Rot. Shift Foreman	10-3-78	< 0.1
17. H. C. Dayton	135208	Rot. Shift Foreman	9-15-78	< 0.1
18. H. A. McDougal	134962	Rot. Shift Foreman	9-21-78	< 0.1
19. M. J. Garza	133521	Instr. Technologist	9-26-78	< 0.1
20. J. J. Hernandez	140002	Instr. Processman	9-15-78	< 0.1
21. R. N. Joiner	131433	Instr. Processman	9-22-78	0.1
22. T. W. Ferguson	100744	Material Control Clerk	10-6-78	< 0.1
23. O. Bankston	132572	Production Clerk	10-11-78	< 0.1
24. C. Anderson	115435	Control Oper. A	9-14-78	< 0.1
25. C. A. Fritze	116142	Control Oper. A	9-19-78	< 0.1
26. R. P. Meyers	110304	Control Oper. A	9-22-78	< 0.1
27. R. R. Rustin	113814	Control Oper. A	9-25-78	< 0.1
28. W. D. Wood	115122	Control Oper. A	9-13-78	< 0.1
29. J. W. Christy	134071	Control Oper. B	9-29-78	< 0.1
30. D. Heinrich	134880	Control Oper. B	9-11-78	< 0.1
31. S. E. Lewis	137377	Control Oper. B	9-13-78	< 0.1
32. J. W. Aguilar, Jr.	138003	Control Oper. C	10-11-78	< 0.1
33. G. E. Brown	138813	Control Oper. C	9-11-78	< 0.1
34. L. J. Cortemelia	138835	Control Oper. C	10-5-78	0.1
35. R. J. Garner	136251	Control Oper. C	9-20-78	0.2
36. G. H. Grear	139239	Control Oper. C	9-28-78	0.1
37. E. Griggs, Jr.	137292	Control Oper. C	9-20-78	0.2
38. J. D. Hancock	117331	Control Oper. C	10-3-78	< 0.1
39. V. A. Huettt, Jr.	133621	Control Oper. C	9-22-78	< 0.1
40. J. C. Malloy	137301	Control Oper. C	9-14-78	< 0.1

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TABLE I (continued)

	NAME	MASTER NO.	JOB CLASSIFICATION	DATE	FIBERS/CC > 5 um
41.	M. V. Montgomery	131902	Control Oper. C	9-27-78	< 0.1
42.	R. W. Roddy	134864	Control Oper. C	9-26-78	< 0.1
43.	W. M. Tyson	135085	Control Oper. C	10-10-78	< 0.1
44.	E. J. Wiley	136698	Control Oper. C	10-4-78	< 0.1
45.	D. L. Hobbs	136252	Class 1 Oper.	9-11-78	< 0.1
46.	M. L. Boulden	139655	Class 2 Oper.	9-20-78	< 0.1
47.	R. J. Bugg, Jr.	139770	Class 2 Oper.	9-25-78	< 0.1
48.	F. R. Carroll	138181	Class 2 Oper.	9-20-78	< 0.1
49.	M. D. Davis	138985	Class 2 Oper.	9-18-78	< 0.1
50.	H. Devries III	132824	Class 2 Oper.	9-21-78	< 0.1
51.	I. Falcon	137632	Class 2 Oper.	9-11-78	< 0.1
52.	G. Flores	138866	Class 2 Oper.	9-21-78	< 0.1
53.	J. Freelon, Jr.	137693	Class 2 Oper.	9-21-78	< 0.1
54.	G. Garza	134854	Class 2 Oper.	9-18-78	< 0.1
55.	F. Gonzales, Jr.	135143	Class 2 Oper.	9-13-78	< 0.1
56.	W. B. Hall	139240	Class 2 Oper.	9-27-78	< 0.1
57.	D. E. Hamilton	130801	Class 2 Oper.	9-26-78	< 0.1
58.	E. C. Mata	133775	Class 2 Oper.	9-18-78	< 0.1
59.	R. L. Mickens	139063	Class 2 Oper.	9-22-78	< 0.1
60.	F. L. Norris	138305	Class 2 Oper.	9-12-78	< 0.1
61.	E. G. Nunez	138517	Class 2 Oper.	9-22-78	< 0.1
62.	O. Ramirez	138449	Class 2 Oper.	10-2-78	< 0.1
63.	J. L. Roberson	139188	Class 2 Oper.	9-20-78	< 0.1
64.	N. Rodriguez	137390	Class 2 Oper.	9-22-78	< 0.1
65.	W. W. Shimek	131677	Class 2 Oper.	10-2-78	< 0.1
66.	J. J. Sisneroz, Sr.	139765	Class 2 Oper.	9-22-78	0.2
67.	J. E. Valdez	138473	Class 2 Oper.	9-15-78	< 0.1
68.	L. A. Warren	138825	Class 2 Oper.	9-15-78	< 0.1
69.	D. E. Williams	136236	Class 2 Oper.	10-2-78	< 0.1
70.	E. A. Engeling	107860	Class 2 Oper.	10-3-78	< 0.1
71.	D. E. Lewis	130122	Class 2 Oper.	10-6-78	< 0.1
72.	T. E. Cook	131795	Sr. Asst. Chem. Class A	9-26-78	< 0.1
73.	S. K. Heffernan	140854	Asst. Chem. Class B	10-5-78	< 0.1
74.	D. P. Edwards	136677	Pipefitter	10-5-78	< 0.1
75.	E. D. Hall	136674	Pipefitter	19-6-78	0.2
76.	R. D. Mickle	138177	Machinist	9-13-78	< 0.1
77.	R. Aaron, Jr.	2980	Machinist	9-21-78	< 0.1
78.	D. Bauer	0954		10-17-78	< 0.1
79.	J. Bulejski	2654		10-11-78	< 0.1
80.	K. Cadiz	850		10-16-78	< 0.1
				10-17-78	< 0.1

CONTRACTORS

TABLE I (continued)

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MASTER NO.

NAME

JOB CLASSIFICATION

DATE FIBERS /CC > 5 um

CONTRACTORS (continued)

81.	C. Caldwell	132	10-16-78	< 0.1
82.	O. Crowell	7352	10-12-78	0.2
83.	M. Duke	8848	10-9-78	< 0.1
84.	D. Foytik	SC 160-14-721	10-17-78	< 0.1
85.	P. P. Garcia	8846	10-10-78	< 0.1
86.	G. Gee	034	10-19-78	< 0.1
87.	B. K. Lantiere	2784	10-17-78	0.2
88.	G. E. Mathis, Sr.	7370	10-9-78	< 0.1
89.	G. E. Mathis, Jr.	3801	10-9-78	< 0.1
90.	G. McCarty	4887	10-12-78	< 0.1
91.	C. Payne	2595	10-17-78	< 0.1
92.	L. Peden	096	10-18-78	< 0.1
93.	D. Penrose	3558	10-10-78	< 0.1
94.	J. A. Perkins	215	10-13-78	< 0.1
95.	W. Rose	171	10-18-78	0.2
96.	S. Snyder	2336	9-10-78	< 0.1
97.	D. Swansey	15783	10-12-78	< 0.1
98.	K. White	7840	10-13-78	< 0.1
99.	S. Yaklin	6081	10-12-78	< 0.1