

CHAMBERS WORKS ASBESTOS MONITORING
1966 - 1972

EXHIBIT # 0-25-1-1-1
DATE Oct 5, 1978
MASTROIANI & FORMAN
CERTIFIED SHORTHAND REPORT

Chambers Works began an asbestos monitoring program in early 1966. The plant records control program destroyed most of the data and correspondence from the 1966-1972 monitoring program since there were no plant or legal reasons to keep these records.

However, sufficient records still exist, along with the recollections of personnel involved in the Chambers Works asbestos monitoring program for this period, to clearly establish:

- The Chambers Works asbestos handling study started in 1966 was part of an overall Corporate program to evaluate asbestos (see Attachment 1).
- The objectives of this Chambers Works program were to:
 - define asbestos dust levels for as many asbestos handling operations as possible.
 - define materials containing asbestos.
 - define operations where exposure might occur.
 - define adequate respiratory protection procedures.
 - and to evaluate substitutes for asbestos.
- A. L. Linch, Industrial Hygiene Superintendent, and L. V. Thatcher, Safety Engineer, were assigned responsibility for the Chambers Works program.
- In 1966, Linch signed an agreement with Dr. Martin Corn then Dean of the Occupational Health Department of the University of Pittsburgh, for his group to measure and count asbestos fibers from air samples taken at Chambers Works. Mr. P. Manella was established as our main contact with the University of Pittsburgh (see Attachment 2).
- Mr. P. Manella is currently Chief Industrial Hygienist with OSHA in the Massachusetts Region and Dr. Corn is associated with Johns Hopkins University.
- Both men have been contacted concerning their work for Chambers Works in the 1966-1972 period. Both men clearly remember performing the work and both state that they should have retained the data from this work for Chambers Works but neither man can locate the data nor can the University of Pittsburgh.

**DEFENDANT'S
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- After evaluating asbestos handling at Chambers Works, Lynch and Thatcher concluded that certain operations with asbestos represented the most hazardous operations with the greatest potential for air contamination from asbestos dust. These operations were:

- Sawing
- Welding
- Shaping
- Material handling
- Cutting
- Filing
- Grinding
- and Sanding

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- Attachments 3 and 4 show monitoring data from evaluations in the above categories. Chambers Works personnel conducted these tests at both Chambers Works and the Du Pont Spruance Plant.
- All of the measurements taken were within the accepted standards of 1966 and are also within today's standards.
- It is interesting to note that the areas selected by Lynch and Thatcher in 1966 on what to measure are about the same recommended areas shown in Table 2.1, Page 27, of the Occupational Exposure Sampling Strategy printed by NIOSH in January, 1977. However, this is not surprising since Lynch and Thatcher consulted with Dr. Jeremiah Lynch (see Attachments 5 and 6 for examples) in the 1967-1968 period and Dr. Jeremiah Lynch is the author of the aforementioned NIOSH strategy. Dr. Jeremiah Lynch continued discussions with Du Pont into 1970 (see Attachment 7).
- Based on their evaluations of the stationary samples, Lynch and Thatcher selected pipecoverers and ladders as the group of employees with the greatest asbestos exposure potential and conducted over 150 monitoring tests for these individuals. Attachment 8 shows the list of personnel with the maximum asbestos exposure potential that was developed in 1968.

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- Attachment 9 briefly discusses results for these monitoring tests.
- Attachment 10 again briefly discusses results from personnel monitoring tests and also in Attachment 11.

As a result of the extensive monitoring evaluations made from 1966 to mid-1972 (over 177 tests), Chambers Works evolved a program designed to minimize occupational exposure and to maintain occupational exposure below accepted, recognized limits.

The effectiveness of the Chambers Works asbestos handling program is demonstrated by the fact that over 1,000 monitoring samples have been taken since mid-1972 and in only one case were the accepted limits exceeded and that individual was wearing full protective equipment.

The thrust of the program developed by Lynch and Thatcher is:

- Use of strict procedures for asbestos handling.
- Barricade areas when asbestos handling occurs.
- Keep all other personnel out of the barricaded areas when asbestos handling is in progress.
- Monitor personnel who are handling asbestos within the barricaded areas.
- And monitor the perimeter of the barricades to assure that the barricades have been properly placed.

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C. A. D'Alonzo, M.D.
August 19, 1966

ADDENDUM #1

List of substances containing asbestos which are used on the plant

(Taken from Standard Engineering specifications of Wilmington Engineering Standards SN-M Section - "Substances containing Asbestos.")

102			
102.1	Calcium silicate (reinforced with asbestos)	}	40%
104	Inorganic silicates		of
106	"Unibestos" - High temp. substance (being replaced by 102.1)		lagging
502	Insulating cement-dry mixture (asbestos and mineral wool).		
701	Asbestos roofing - felt sheet form (contains large quantities of asbestos).		
709	Low temperature vapor - barrier mastic - 8-10,000 gal./yr. (used by both ladders and painters).		
712	Finish cement - dry mixture.		
715	Asbestos cloth or tape - a weave with synthetics or cotton.		
724	Asbestos paper - white untreated.		
727	Flexible braided asbestos tubing.		
803	Lagging adhesives - sodium silicate and asbestos fibers mixture.		
811	Water resistant adhesive.		
986	Listing tapes.		

see
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C. A. D'Alonzo, M.D.
August 19, 1965

ADDENDUM #2

Pipecoverers - fifty-six present employees and their medical
classification.

CLASS I (forty-five employees)

<u>Payroll</u> <u>Number</u>	<u>Name</u>	<u>A.S.D.</u>
ED-89250		10- 6-39
ED-46548		12-14-39
ED- 9451		4-25-40
ED-15730		7-19-40
CC- 9258		3-26-41
ED-97690		4-28-41
ED-50529		6-25-43
CC- 6629		5-14-44
ED- 484		3-20-48
CC- 1131		7-19-49
ED-29116		3-20-51
ED-86700		4- 8-51
ED-62406		2-29-53
ED-86154		5- 5-53
ED-56886		8-18-54
ED-85524		4-10-55
CC- 2789		7-15-63
CC- 7632		3-14-64
CC- 6676		4-25-64
CC- 0232		4-30-65
CC- 8670		2-14-66
ED- 8170		3-25-35
ED-46527		5-10-35
ED-80001		4-11-36
ED-82563		11- 7-36
ED-14071		7- 7-38
ED-13693		4-26-36
ED-20880		2-12-37
CC 2609		10-19-57
ED-81891		10-22-57
ED-78329		11- 4-58
ED-18208		5- 7-59
ED-66634		6-30-59
ED-63168		10- 8-59
ED-96995		5- 2-60
ED-49820		5-18-60
CC- 8927		6- 3-60
CC- 1299		7-11-60
CC- 976		8-25-60
ED-76914		12- 6-60
ED-73520		12-14-60
CC- 2771		4-30-61
ED-16620		5- 8-61
CC- 57		12- 8-61
CC- 966		5-25-62

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DUP 1121873

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C. A. D'Alonzo, M.D.
August 19, 1966

ADDENDUM #2 - Page 2

Pipecoverers - present employees and their medical classifications.

Class II (ten employees)

<u>Payroll Number</u>	<u>Name</u>	<u>A.S.D.</u>	
ED- 883	[REDACTED], [REDACTED]	5-27-40	Coronary. Fibrosis by x-ray since 1947. Heart restrictions.
ED-14764	[REDACTED], [REDACTED]	8-02-40	Vision. Fibrosis by x-ray since 1947. No restrictions.
CC- 8677	[REDACTED], [REDACTED]	2-22-42	Coronary. X-ray fibrosis since 1955. Cardiac restrictions
ED-96110	[REDACTED], [REDACTED]	3-26-51	Vision. Fibrosis by x-ray since 1950.
* ED-87555	[REDACTED], [REDACTED]	7-19-63	Pulmonary problem (nonoccupa.) No restrictions Compensatory emphysema with fibrosis.
ED-96890	[REDACTED], [REDACTED]	6-19-33	Eye only (blind).
ED-39616	[REDACTED], [REDACTED]	11-01-34	Pulmonary Chest findings since 1947. No restrictions. No pulmonary disability wage problem.
ED-47619	[REDACTED], [REDACTED]	4-22-37	Coronary insufficiency.. Peribronchial fibrosis since at least 1950. No restrictions.
ED-78180	[REDACTED], [REDACTED]	2-25-39	Hypertensive cardiovascular disease. Some x-ray fibrosis since 1947. No restrictions.
CC- 0120	[REDACTED], [REDACTED]	10-30-58	Renal. No restrictions

see
8/19/66

REDACTED

DUP 1121874

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C. A. D'Alonzo, M.D.
August 19, 1966

ADDENDUM #2 - Page 3

Pipcoverers - present employees and their medical classifications

CLASS III (one employee)

<u>Payroll</u> <u>Number</u>	<u>Name</u>	<u>A.S.D.</u>	
ED-99530	XXXXXXXXXX, XXXXXXXX	4-4-39	Hypertensive cardiovascular and renal disease. <u>Fibrosis by x-ray since 1947.</u>

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RETRACTED

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