



INTERNAL CORRESPONDENCE

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CHEMICALS AND PLASTICS

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to (Name) Mr. D. L. Johnson
Division 511-5518 (512)
Location

Copy to Mr. C. W. Carman
Mr. G. F. Hurley
Mr. C. R. Johnson
Mr. D. R. Paugh
Mr. P. A. Perry
Mr. C. E. Richardson
Mr. H. L. Robinson
Mr. E. C. Shipley

Date December 10, 1979

Originating Dept. Technical Center, IH/EP

Subject Asbestos Monitoring
704 Powerhouse

PROJECT

Determine the exposure of Construction workers to asbestos fibers during insulation stripping in Building 704.

DATE OF SURVEY

November 26 and 27, 1979

DISCUSSION

On November 26 and 27, 1979, separate breathing zone samples were taken on Construction workers to determine their exposure to asbestos fibers while they were stripping and bagging suspected asbestos containing insulation from the exhaust ducts of Number 3 and Number 4 boilers in Building 704 - Powerhouse. During the stripping and clean-up procedure all Construction workers in the work area wore Norton disposable dust respirators, gloves, and coveralls. The boilers had been shut down so the insulation could be properly wetted before and during the stripping. Plastic was placed around the duct to prevent debris from the stripping from falling through the floor grating. Stripped insulation was placed in bags on site for disposal.

CONCLUSIONS

The results are given in the attached table. An 8-hour time-weighted average was calculated for November 26, 1979, since the

Construction workers were monitored during their total exposure for that day. The values are well below the OSHA standard of 2 fibers > 5 $\mu\text{m}/\text{cm}^3$ on a time-weighted average for eight hours.

REFERENCES

Volume 38C-29X4-R1a Asbestos, Dust Determination By Membrane Filter Technique Using Phase Contrast Microscopy

RESULTS

See attachment.

REPORT PREPARED BY

Ruth Clise
Technical Center Industrial Hygiene Group

Ruth Clise

REPORT APPROVED BY

George Hurley
G. F. Hurley

RC/sc

Attachment

RESULTS

<u>DATE</u>	<u>SAMPLE TYPE</u>	<u>TIME (Minutes)</u>	<u>ASBESTOS FIBERS (Fibers >5 µm/cm³)</u>	<u>TIME- WEIGHTED AVERAGE</u>	<u>REMARKS</u>
11/26/79	S. M. Barker	45	2.04	----->0.7	Stripping - A.M.
	S. M. Barker	92	1.83		Stripping - A.M.
	S. M. Barker	64	.94		Stripping - P.M.
11/26/79	G. H. Landers	47	1.34	----->0.5	Stripping - A.M.
	G. H. Landers	91	.95		Stripping - A.M.
	G. H. Landers	70	.85		Stripping - P.M.
11/26/79	P. M. Brown	47	2.03	----->0.7	Cleaning and bagging - A.M.
	P. M. Brown	105	.95		Cleaning and bagging - A.M.
	P. M. Brown	80	.46		Cleaning and bagging - P.M.
	P. M. Brown	68	1.44		Cleaning and bagging - P.M.
11/26/79	D. R. Powell	47	.90	----->0.5	Cleaning and bagging - A.M.
	D. R. Powell	109	.47		Cleaning and bagging - A.M.
	D. R. Powell	83	.36		Cleaning and bagging - P.M.
	D. R. Powell	66	2.03		Cleaning and bagging - P.M.
11/27/79	C. N. Cunningham	54	0.49		Stripping
11/27/79	J. F. Chandler	54	0.62		Stripping
11/27/79	P. M. Brown	41	0.62		Bagging and cleaning
11/27/79	D. R. Powell	38	1.86		Bagging and cleaning

TO: W. T. Shelton, 704 Shop

Computer Ref. W1123CC: G. F. Hurley
H. L. RobinsonPERSON MONITORED R. E. Raines, John GreenleeLocation Bldg. 704 Powerhouse Date 11/24/80
Basement

EXPOSURE RESULTS

	Conc.	Sampling Time	Comments
Sample 1	.07 fibers/cc	41 minutes	Personal Sample - R.E. Raines
2	.13 fibers/cc	41 minutes	Personal Sample - John Greenlee
3			
4			
5			
6			

Time-Weighted Average Concentration (TWA) -Ceiling Concentration -

ALLOWABLE EXPOSURE

TWA	<u> </u>	OSHA	UCC	Other
Ceiling	<u> </u>	OSHA	UCC	Other

COMMENTS

Samples taken during stripping of about 20 feet of high pressure steam line in the basement of the Powerhouse. Persons monitored wore respirators and used a sprayer to wet down the insulation to be removed. Very little visible dust was generated during the stripping operation. All necessary precautions were taken during the operation and the workers did an excellent job of cleaning up afterwards. Colorimetric testing of a sample of the insulation removed showed no presence of asbestos.

WORK BY Mario StowersAPPROVED BY George Hurley