



INTERNAL
CORRESPONDENCE

UNION CARBIDE CORPORATION

TO: A. F. Terry
FROM: 704
SUBJECT: 511

August 28, 1987

EM&TS - HS&EA

Industrial Hygiene

CC: P. D. Gossage - 701/4
C. P. Maxwell - 701/2
R. G. Rowe, M.D. - 791
C. L. Ruddie - 704
R. E. Sergent - 725
P. D. Sherman - 701/2

Asbestos Exposure
Monitoring - 701

Attached are the results of the Asbestos exposure monitoring performed on two insulators, while stripping asbestos inside of a negative pressure enclosure, and two carpenters, while assisting with moving enclosures and the catch chute. The employees were monitored in Building 701 - 3rd floor and the basement on August 17, 18, 19, 20, and 21, 1987.

The insulators were equipped with 2 pair of coveralls with headcover, boots and respirators. (A description of the respirator worn on a given day can be found along with exposure results.) The carpenters were equipped with a pair of disposable coveralls and half-face HEPA cartridge respirators (see table for specific respirator).

The monitoring results indicate that the levels found on the insulators were well above the 0.2 fiber/cc Permissible Exposure Level (PEL), established by OSHA for an 8-hour workday (TWA₈). However, they were adequately equipped with respirators. The samples collected on the carpenters were all well below the OSHA 0.1 fiber/cc Action Level. There were no 8-hour time weighted averages reported because these employees had worked with some asbestos insulation before the monitoring periods. Also, the sampling period was not adequate to calculate the TWA₈.

The area samples collected on the 3rd floor and basement were well below the Action Level, which would indicate that the airborne fibers were contained inside of the negative pressure enclosure. A commendation is due to all employees involved in the work.

August 28, 1987

A source sample was collected inside of the enclosure after being exhausted for approx. 24 hours with a HEPA filtered vacuum cleaner. The sample was collected to determine if the airborne fibers were being adequately removed before moving the enclosure. The result showed that the levels were well below the Action Level.

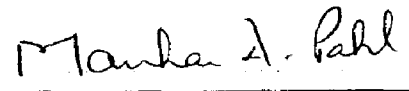
Please notify all of the employees of their exposure monitoring results as soon as possible. Have them sign and date this report and return to M. A. Patel at Building 701-330.

If we can be of further assistance, please feel free to call us on extension 4779 or 3750.

WORK BY:

APPROVED BY:


Vance E. Stover


Manhar A. Patel

Attachment

VES:MAP:rab
2646P

ASBESTOS EXPOSURE MONITORING - 701

<u>Date</u>	<u>Sample Type/ Employee Name</u>	<u>Sampling Time</u>	<u>Air Conc. fibers/cc</u>	<u>TWAg fibers/cc</u>	<u>Type of Respirator Used</u>	<u>COMMENTS</u>
8-17-87	I	2hrs 12min	0.601	-	AO R57A Half- face HEPA cartridge	Collected while removing approx. 60 feet of asbestos from pipe chase between labs 301 and 303 - inside of negative pressure enclosure.
8-17-87		2hrs 9min	0.720	-	AO R57A Half- face HEPA cartridge	Collected while removing approx. 60 feet of asbestos from pipe chase between labs 301 and 303 - inside of negative pressure enclosure.
8-17-87		2hrs 7min	0.0167	-	Willson R12 Half-face HEPA cartridge	Collected while installing foam into pipe chase, moving enclosure and catch chute in basement.
8-17-87	Area	2hrs 6min	0.018	-	-	Collected in the hallway halfway between Micro trap and the opening of the negative pressure enclosure.
8-17-87	Area	2hrs 10min	<0.0071	-	-	Collected in basement under the chases where asbestos stripping took place.
						Comp. Ref. W2270
8-18-87	Area	5hrs 28min	<0.002	-	-	Collected in 3rd floor hallway between the two pipe chases being stripped - between labs 303 and 305.
8-18-87	Area	VOIDED - SAMPLER QUIT				Basement under pipe chases.
8-18-87		1hr 23min	2.197	-	AO R57A Half- face HEPA cartridge	Collected while stripping asbestos from pipe chases between labs 303 and 305 - approx. 40 feet.
8-18-87		1hr 19min	1.384	-	AO R57A Half- face HEPA cartridge	Collected while stripping asbestos from pipe chases between labs 303 and 305 - approx. 40 feet.

ASBESTOS EXPOSURE MONITORING - 701
(continued)

<u>Date</u>	<u>Sample Type/ Employee Name</u>	<u>Sampling Time</u>	<u>Air Conc. fibers/cc</u>	<u>TWAg fibers/cc</u>	<u>Type of Respirator Used</u>	<u>COMMENTS</u>
8-19-87		2hrs 3min	0.036	-	R12 Willson Half-face HEPA cartridge	Collected while moving enclosures and while moving chute in basement.
8-19-87	Area	5hrs 25min	0.008	-	-	Collected in hallway just outside of negative pressure enclosures - between labs 313 and 315.
8-19-87	Area	VOID - SAMPLER QUIT				Basement under pipe chases.
8-19-87		1hr 29min	1.0176	-	AO R57A Half- face HEPA cartridge	Collected while removing asbestos inside negative pressure enclosur from 60 feet of line.
8-19-87		1hr 28min	1.077	-	AO R57A Half- face HEPA cartridge	Collected while removing asbestos inside negative pressure enclosur from 60 feet of line.

8-20-87	Source	2hrs 18min	<0.005	-	-	Collected inside of negative pressure enclosure before pulling away from wall - the HEPA filtered vacuum had run for approx. 24 hours before this sample was collected.
8-20-87	Personal/	VOIDED Hole in middle of filter cassette			Full face supplied air	
8-20-87	Area	5hrs 20min	0.006	-	-	Collected on 3rd floor between the 2 pipe chases being stripped.
8-20-87		1hr 20min	2.677	-	Full face supplied air	Collected while stripping approx. 50 feet of asbestos from 2 pipe chases - inside of negative pressure enclosure.
8-20-87	Area	4hrs 57min	<0.004	-	-	Collected in the basement directly under the pipe chases being stripped.

ASBESTOS EXPOSURE MONITORING - 701
(continued)

<u>Date</u>	<u>Sample Type/ Employee Name</u>	<u>Sampling Time</u>	<u>Air Conc. fibers/cc</u>	<u>TWAg fibers/cc</u>	<u>Type of Respirator Used</u>	<u>COMMENTS</u>
8-21-87	Area	5hrs 35min	0.016	-	-	Collected in the exhaust air coming from Micro trap.
8-21-87	Area	5hrs 23min	0.013	-	-	Collected in basement - east end - under the pipe chases where pipefitters were working.
8-21-87		1hr 29min	0.302	-	AO R57A Half-face HEPA cartridge	Collected while removing asbestos from pipe chases (60 feet) inside of negative pressure enclosure.
8-21-87		1hr 29min	0.783	-	AO R57A Half-face HEPA cartridge	Collected while removing asbestos from pipe chases (60 feet) inside of negative pressure enclosure.

ASBESTOSPermissible Exposure Level

TWAg 0.2 fibers/cc OSHA
Action Level 0.1 fibers/cc