NYC 9/11 Public Portal Document

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Environmental Monitoring Update
Data reported to NYC DOH 9/20/01 as of 4 pm

Asbestos

Ambient air monitoring

Agency	Date	Location	N samples	N above 0.01 fibers/cc*	N above OSHA PEL@	Maximum (fibers/cc)	Comment
USEPA (rounds 8 and 9)	9/18/01	Hot zone, close in	11	2	0	0.047	Highest levels at Albany and Greenwich and Liberty and South End, TEM was <0.008
	9/18/01	Hot zone, perimeter	7	0	0	0.042	Max was at Wall and Broadway, TEM was <0.008
	9/18/01	Nearby neighborhood to Hot zone	4	0	0	0.018	
	9/19/01	Fresh kills	18	2	0	0.029	Both samples above 0.01 at screening OPS (site)

* 0.01 fibers per cc by TEM method. Approximately equivalent to indoor clearance level for residences or schools

@ US-OSHA permissible exposure limit for 8 hour time weighted average. Results are by PCM method.

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Personal air monitoring

Agency	Date	Location	Activity	N samples	N above OSHA PEL*	Maximum (fibers per cc)	Comment
Con Ed	9/19/01	Hot Zone	Cable splicing in manhole	2	0	<0.007	
	9/19/01	Hot Zone	Walking – various locations	4	0	0.012	
OSHA	Data not received at DOH as of 4 pm						
Federal Occupational Health	Data not received at DOH as of 4 pm						

* 0.1 fibers per cc. US-OSHA permissible exposure limit for 8 hour time weighted average. Results are by PCM method.

Bulk (settled) dust

Agency	Date	Location	N samples	N asbestos detected	N > 1%	Maximum (%)	Comment
USEPA	9/18/01	Hot zone, close in	11	10	6	1.9%	

Interpretation: The most recent ambient air samples in and around WTC and Fresh Kills, generally well below permissible exposure limits for occupational exposure and, in most cases, for community exposure. However, potential for higher exposures exist based on past personal air samples and presence of asbestos in dust and debris. Continued use of appropriate respiratory protection for workers in or near potentially dusty locations or tasks is indicated. Dust suppression measures should be expanded. Additional personal monitoring underway.

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Other Compounds

All test results below provided by US EPA

Lead in ambient air: Four samples in hot zone were collected. Highest was 1.9 micrograms per cubic meter. Other samples < 1.5 micrograms per cubic meter (National Air Quality Standard), OSHA PEL is 50 micrograms per cubic meter.

Interpretation: Lead levels in ambient air well below levels for worker concern. Personal monitoring pending.

Volatile organic compounds in ambient air: 3 samples were collected around the debris pile. Low levels of VOCs, no immediate health concerns. 2 samples were collected in the plume – Benzene detected at 100 parts per billion, just at OHSA PEL.

Interpretation: VOC exposures for most workers should be low, but potential exposures exist. Appropriate respiratory protection should continue to be worn.

Miscellaneous toxic and acid gasses (by direct reading instruments): low levels of phosgene and hydrogen cyanide present.

Interpretation: No immediate public or occupational health threat. Personal air sampling pending. Appropriate respiratory protection should continue to be worn.

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