

ATTACHMENT 2

WTC Indoor Air Monitoring - Sampling and Analytical Procedures

Media	Sampling Points	Analytical Parameters	Sampling Method Proposed	Sampling Vulnerability/Practicality	Analytical Method Proposed
Settled Dust Porous Soft surfaces	Carpets, fabric furniture or drapery in areas of activity (living rooms, family rooms)	Asbestos	ASTM D 5755-95	This is a micro vacuuming method. Three collocated samples will be collected from each location.	ASTM D 5755-95
		Lead	ASTM E 1973-99	This is a micro vacuuming method. Three collocated samples will be collected from each location.	SW-846 6010B
Settled Dust Non-porous Hard	Horizontal surfaces of tables or counters and bare floors, ceilings and walls in areas of activity	Asbestos	ASTM D 6480-99	Wipe Samples	ASTM D 6480-99 (wipe)
		Lead	ASTM E 1728	Wipe Samples	SW-846 6010B
		Dioxins	ASTM D 6661-01	Wipe Samples	ASTM 6661-01/SW-846 8290
		PAHs	ASTM D 6661-01	Wipe Samples	ASTM 6661-01/SW-846 8270C
		Silica	ASTM E 1728**	Wipe Samples	NIOSH 7500 (XRD)
		MMVF	ASTM D 6480-99	Samples will be combined with the asbestos sampling.	EMSL MSD.0300
Indoor Air	Areas of known activity (living rooms, family)	Asbestos	NIOSH 7400	Air pump operated at 10L/min for 8 hours to achieve the COPC wkgroup detection limits	PCM NIOSH 7400 followed by TEM AHERA method.
		Lead	NIOSH 7300	Air pump operated at 10L/min for 8 hours to achieve the COPC wkgroup detection limits	SW-846 6010B
		PAHs	TBD. Pending sample volume requirements and to account for break through on the cassettes.	Pilot clean-up study only	SW-846 8270
		Dioxins	TBD. Pending sample volume requirements and to account for break through on the cassettes.	Pilot clean-up study only. Availability of sample cassettes for dioxins analysis is questionable. Apparently the supply is low.	SW-846 8290
		Silica	NIOSH 7500	Air pump operated at 2.5L/min for 8 hours to achieve the COPC wkgroup detection limits	NIOSH 7500 (XRD)
		MMVF	NIOSH 7400	Assumed that it behaves the same as asbestos, samples will be combined with the asbestos sampling.	EMSL MSD.0300

NOTE: All samples (cassettes and wipes) will be preweighed by the laboratory or supplier prior to sample collection. After sample collection and upon receipt of the samples by the laboratory, the laboratory will weigh the sample wipe or cassette prior to performing the analysis. This may change depending upon the availability of preweighed materials. May collect samples for total dust.

** Silica will be collected as a dust samples as is Lead. This was decided since pulverized silica would be particulate like and not fiber like as with asbestos and MMVF.