

5/21/02

WTC Indoor Air Monitoring - Sampling and Analytical Procedures For Background and Pilot Clean up Studies

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 surfaces	Horizontal surfaces of tables or counters and bare floors, ceilings and walls in areas of activity (living rooms, family rooms)	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 rooms)	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: It is proposed that samples for total dust be collected with the samples collected for silica analysis.

** 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.

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