

WTC Indoor Air Monitoring - Sampling and Analytical Procedures

Media	Sampling Points	Analytical Parameters	Sampling Method Proposed	Sampling Vulnerability/Practicality	Analytical Method Proposed
Porous Soft surfaces	Carpets, fabric furniture or drapery in areas of activity (living rooms, family rooms)	Asbestos	Microvac ASTM 5755-95	"This test method does not describe procedures or techniques required to evaluate the safety or habitability of buildings with asbestos-containing materials, or compliance with federal, state, or local regulations or statutes. It is the user's responsibility to make these determinations." (Section 5.1.1 of method 5755-95)	microvac can't be used for clearance - use to determine presence/absence detect/non-detect ASTM 5755-95
		Lead	Microvac ASTM 5755-95**	"	NIOSH 7300
		Dioxins	Still checking on methods. Reached out to RTP and HQ. Waiting for additional information	After speaking with several people in HQ and RTP, it does not appear there are standardized methods for the collection of these parameters, rather many of the methods being used today are research and development procedures.	To be determined once the sampling method (if any) has been selected
		PAHs	"	"	can't quantify before + after cleaning
		Silica	"	"	"
		MMVF	Microvac ASTM 5755-95	See the comment for asbestos. Samples will be combined with the asbestos sampling.	EMSL MSD.0300
Non-porous Hard surfaces	Horizontal surfaces of tables or counters and barefloors, ceilings and walls in areas of activity (living rooms, family rooms)	Asbestos	Wipe ASTM D 6480-99 or Microvac ASTM 5755-95	"This test method does not describe procedures or techniques required to evaluate the safety or habitability of buildings with asbestos-containing materials, or compliance with federal, state, or local regulations or statutes. It is the user's responsibility to make these determinations." (Section 5.1.1 of method 5755-95)	ASTM D 6480-99 (wipe) or ASTM 5755-95 (microvac)
		Lead	NIOSH 9100	None known, wipe sampling has been legally defended.	SW-846 6010B
		Dioxins	ASTM D 6661-01	"	ASTM 6661-01/SW-846 8290
		PAHs	ASTM D 6661-01	"	ASTM 6661-01/SW-846 8270C
		Silica	See comment for silica above.	See comment for silica above.	See comment for silica above.
		MMVF	Wipe ASTM D 6480-99 or Microvac ASTM 5755-95	Same as asbestos microvac. 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 PIC wkgoup 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 PIC wkgoup detection limits	SW-846 6010B
		Silica	NIOSH 7500	Air pump operated at 2.5L/min for 8 hours to achieve the PIC wkgoup 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 method is for asbestos and is being modified for the collection of lead dust. Modification - to use the filter specified for method NIOSH 7300