

Fax Transmittal

To: Michael Gilsenan

PII

From: Eric Wilson

Attached are documents
referred in recommended
a long article for
15th Canal Street and
Bob Fitzpatrick's comments
on the sound.

5 pages without cover

DRAFT**WTC Indoor Air/Environment Pre-Cleanup Pilot Study
Sampling Matrix**

Wipe Samples	Asbestos/ MMVF	Lead	Dioxins	PAHs	Silica, Calcite, Gypsum	Total Dust	Total # Samples
Ceilings	1	0	0	0	0	0	1
Walls	1	1	1	1	1	0	5
Bare floor	1	1	1	1	1	0	5
Counter tops or furniture (table tops)	1	1	1	1	1	1	6
Total Wipe Samples/parameter	4	3	3	3	3	1	17

Micro-vacuum Samples	Asbestos/ MMVF	Lead	Dioxins	PAHs	Silica, Calcite, Gypsum	Total Dust	Total # Samples
Carpets or Drapery	3	3	0	0	0	0	6
Fabric Furniture (couch or chair)	3	3	0	0	0	0	6
Total Micro-vacuum Samples/parameter	6	6	0	0	0	0	12

Indoor Air Samples	Asbestos/ MMVF	Lead	Dioxins	PAHs	Silica, Calcite, Gypsum	Total Dust	Total # Samples
Main living Space(living rooms)	0	0	2	2	0	0	4

Bulk Dust Samples	Asbestos/ MMVF	Lead	Dioxins	PAHs	Silica	pH	Total # Samples
	1	1	1	1	1	1	6

NOTES:

1 MMVF - Man Made Vitreous Fibers.

2 This table does not include the 10% Quality Control samples.

3 The total number of samples presented represents the number of samples to be collected per unit.

4

Dioxins and PAH samples in indoor air will be collected from the 2 commercial spaces. Additional samples may be collected if clean up criteria is not met.

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WTC Indoor Air/Environment Cleanup Pilot Study Sampling Matrix

Indoor Air Samples	Asbestos/ MMVF	Lead	Dioxins	PAHs	Silica, Calcite, Gypsum	Total Dust	Total # Samples
Monitoring for worker exposure	1	1	0	0	1	0	3

NOTES

MMVF - Man Made Vitreous Fibers

This table does not include the 10% Quality Control samples.

Air samples will be collected during the clean up to monitor worker exposure.

WTC Indoor Air/Environments Monitoring - Sampling and Analytical Procedures For Background and Pilot Clean up Studies					
Media	Sampling Points	Analytical Parameters	Sampling Method	Description	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	No vacuuming method. Three collocated samples will be collected from each location.	ASTM D 5755-95
		Lead	ASTM E 1973-95	No 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	HUD Appendix 13.1	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
		Total Dust	HUD Appendix 13.1**	Wipe Sample collected at one location per unit.	No Formal Method (NIOSH 7500 Modified)
		Silica, calcite, gypsum	HUD Appendix 13.1**	Wipe Samples: All parameters will be collected on one wipe.	NIOSH 7500 (XRD)
		MMVI	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 limit	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 limit	SW-846 6010B
		PAHs	NIOSH 1515	Air pump operated at 2L/min for 8 hours. Pilot Clean-up study only for worst case scenarios.	SW-846 8270 (Analytical method with be modified to achieve the COPC wkgroup detection limit)
		Dioxins	10-9 (Measured for indoor air)	Air pump operated at 2.5L/min for 35 hours. This modification is not a proven method. To be conducted during the Pilot Clean-up study only for worst case scenarios.	SW-846 8290
		Silica, calcite, gypsum	NIOSH 7500	Air pump operated at 2.5L/min for 8 hours to achieve the COPC wkgroup detection limits	NIOSH 7500 (XRD)
		MMVI	NIOSH 7400	Assumed that it behaves the same as asbestos, samples will be combined with the asbestos sampling.	EMSL MSD.0300
Bulk Dust	HVAC systems and AC units (collection of bulk dust sample from the unit air filters). Background study only.	Asbestos	Bulk Sample	Bulk samples will be collected from HVAC or AC window type unit filters, shaken into a plastic bag and transferred into the sample container.	PLM NYS 198.1 followed by TEM NYS 198.4
		Lead	Bulk Sample	(if the volume required is not attainable for all analysis, the sample will be analyzed for asbestos only.	SW-846 6010B
		PAHs	Bulk Sample	(if the volume required is not attainable for all analysis, the sample will be analyzed for asbestos only.	SW-846 8270
		Dioxins	Bulk Sample	(if the volume required is not attainable for all analysis, the sample will be analyzed for asbestos only.	SW-846 8290
		Silica, calcite, gypsum	Bulk Sample	(if the volume required is not attainable for all analysis, the sample will be analyzed for asbestos only.	NIOSH 7500 (XRD)
		MMVI	Bulk Sample	(if the volume required is not attainable for all analysis, the sample will be analyzed for asbestos only.	PLM NYS 198.1/EMSL MSD.0300

NOTE: ** Wipe samples for silica, calcite and gypsum will be collected using the HUD Appendix 13.1 method since no standardized method is available.

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WTC Indoor Air/Environment Post Cleanup Pilot Study Sampling Matrix

Wipe Samples	Asbestos/ MMVF	Lead	Dioxins	PAHs	Silica, Calcite, Gypsum	Total Dust	Total # Samples
Ceilings	1	0	0	0	0	0	1
Walls	1	1	1	1	1	0	5
Bare floor	1	1	1	1	1	0	5
Counter tops or furniture (table tops)	1	1	1	1	1	1	6
Total Wipe Samples/parameter	4	3	3	3	3	1	17

vacuum samples	Asbestos/ MMVF	Lead	Dioxins	PAHs	Silica, Calcite, Gypsum	Total Dust	Total # Samples
Drapery	3	3	0	0	0	0	6
Furniture (sofa or chair)	3	3	0	0	0	0	6
Micro-vacuum samples/parameter	6	6	0	0	0	0	12

Indoor Air Samples	Asbestos/ MMVF	Lead	Dioxins	PAHs	Silica, Calcite, Gypsum	Total Dust	Total # Samples
Main Living Space(living rooms)	2	1	0	0	1	0	4

NOTES

MMVF - Man Made Vitreous Fibers

This table does not include the 10% Quality Control samples

The total number of samples presented represents the number of samples to
be collected per unit

Comments on the New York City Department of Environmental Protection**Bureau of Environmental Compliance****Asbestos Contractor--Cleaning Procedures for 125 Cedar Street**

1) Under Purpose it states--12 stories--approximately 52,000 square feet. It is recommended that the building be changed to 12 stories with a penthouse apartment, a basement and two commercial spaces located on the first floor. The square footage of the building needs to be changed to better reflect the actual number of square feet to be cleaned. Not included in the above square footage are ceilings, walls, staircase, elevator shaft (?), etc.

2) The Penthouse portion needs to be cleared from asbestos during roof demolition activity.

3) Approximately 100 linear feet of HVAC ductwork in the corner of the building needs to be removed and disposed of as asbestos.

Work needs to be done to remove the GFCIs from the refrigeration and air conditioning units.

Enclosure at mail chute needs to be added.

Work needs to floor, ceilings and walls.