

• **Gerry Kelpin**

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Sent: Monday, December 31, 2001 3:39 PM
Attach: EPA December 31 Sampling Situation Data Report.eml
Subject: Fwd: EPA December 31 Sampling Situation Data Report
 Happy Holidays!!!!

If you would like to be removed from the distribution list please send a note to wtcddata@gw.dec.state.ny.us or to mjdarcan@gw.dec.state.ny.us

Attached email contains data that has been shared with you by a member of the Environmental Sampling and Assessment Workgroup.

This data is in its original format as provided by the data collector. This system will provide you with the fastest access to the most current results available and will run concurrently until EPA's internet database is tested and functioning smoothly. Any data that has been provided to this email address will automatically be forwarded to EPA for inclusion in their master database. (no need to send a duplicate

1/2/2002

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Please include all appropriate meta data and summaries as well as a point of contact for any questions.

This email box wtcdata@gw.dec.state.ny.us is managed by Environmental Coordination Branch of New York State Dept. Environmental Conservation. Your primary point of contact is Matt Darcangelo at (518) 402-9606 or (518) 402-9646.

In order for data to be distributed by this system, the data must be sent first person to this address (no forwards). Any replies will be sent to Matt Darcangelo's mailbox and not automatically be sent to the entire group

Have a great day,

Matt Darcangelo
mjdarcan@gw.dec.state.ny.us
(518) 402-9606 desk
(518) 342-3114 pager

1/2/2002

U.S. Environmental Protection Agency (www.epa.gov)
Sampling Situation Report
Monday, December 31, 2001

Fixed Ambient Air Sampling Locations (Asbestos)

- NYC / ER (Dec 19, 1200 - 2359 hrs)
 - All 22 samples analyzed were below the TEM AHERA standard.
- NYC / ER (Dec 20, 0001 - 1200 hrs)
 - All 22 samples analyzed were below the TEM AHERA standard.
- NYC / ER (Dec 20, 1200 - 2359 hrs)
 - All 22 samples analyzed were below the TEM AHERA standard.
 - Note: Low sample volume recorded.
- NYC / ER (Dec 21, 0001 - 1200 hrs)
 - All 21 samples analyzed were below the TEM AHERA standard.
 - 1 sample (Location V-duplicate) was not collected due to equipment malfunction.
 - Note: Low sample volumes recorded.
- NYC / ER (Dec 21, 1200 - 2359 hrs)
 - All 21 samples analyzed were below the TEM AHERA standard.
 - 1 sample (Location T) was not collected since access to that location was not available.
- NYC / ER (Dec 22, 0001 - 1200 hrs)
 - All 21 samples analyzed were below the TEM AHERA standard.
 - 1 sample (Location T) was not collected since access to that location was not available.
- NYC / ER (Dec 22, 1200 - 2359 hrs)
 - All 21 samples analyzed were below the TEM AHERA standard.
 - 1 location (Location T) was not sampled.
- NYC / ER (Dec 23, 0001 - 1200 hrs)
 - All 21 samples analyzed were below the TEM AHERA standard.
 - 1 location (Location T) was not sampled.
- NYC / ER (Dec 23, 1200 - 2359)
 - All 20 samples analyzed were below the TEM AHERA standard.
 - 1 sample (Location C) was not collected due to equipment malfunction.
 - 1 location (Location T) was not sampled.

- NYC / ER (Dec 24, 0001 - 1200)
 - All 23 samples analyzed were below the TEM AHERA standard.
 - Results include 2 samples from Location T that were previously set up on Dec. 21 and 22 but were not accessible on those days (see items listed above for those days).
 - 1 location (Location T) was not sampled.
- NYC / ER (Dec 24, 1200 - 2359)
 - Results pending.
- NYC / ER (Dec 25, 0001 - 1200)
 - Results pending.
- NYC / ER (Dec 25, 1200 - 2359 hrs)
 - All 19 samples analyzed were below the TEM AHERA standard.
 - 2 locations (Locations I and T) were not sampled.
 - Note: Low sample volumes recorded.
- NYC / ER (Dec 26, 0001 - 1200 hrs)
 - All 20 samples analyzed were below the TEM AHERA standard.
 - 1 location (Location T) was not sampled.

Landfill Ambient Air Sampling Locations

- Fresh Kills (Dec 20, 0842 - 2158) - Asbestos
 - All 18 samples analyzed were below the TEM AHERA standard.
 - 1 sample (Location P-6) was not collected since high winds blew sample off pump.
- Fresh Kills (Dec 21, 0750 - 2204) - Asbestos
 - All 17 samples analyzed were below the TEM AHERA standard.
 - 1 sample (Location P-6) was not collected since high winds blew sample off pump.
 - 1 location (Location O-17) was not sampled.
- Fresh Kills (Dec 22, 0820 - 2200) - Asbestos
 - All 18 samples analyzed were below the TEM AHERA standard.
 - 1 location (Location O-19) was not sampled.
- Fresh Kills (Dec 23, 0810 - 2145) - Asbestos
 - All 16 samples analyzed were below the TEM AHERA standard.
 - 1 sample (Location W-11) was not collected due to equipment malfunction.
 - 1 sample (Location O-17) was not collected since access to that location was not available.

- 1 location (Location O-19) was not sampled.
- Note: Low sample volume recorded.
- Fresh Kills (Dec 24, 0905 - Dec 25, 0005) - Asbestos
 - All 15 samples analyzed were below the TEM AHERA standard.
 - 1 sample (Location P-6) was not collected since high winds blew sample off pump.
 - 1 sample (Location B-13) was not collected due to equipment malfunction.
 - 1 sample (Location O-17) was not collected since access to that location was not available.
 - 1 location (Location O-19) was not sampled.
- Fresh Kills (Dec 26, 0758 - 2205) - Asbestos
 - All 18 samples analyzed were below the TEM AHERA standard.
 - 1 sample (Location B-14) was not collected due to equipment malfunction.
- Fresh Kills (Dec 27, 0757 - 2235) - Asbestos
 - All 17 samples analyzed were below the TEM AHERA standard.
 - 2 sample (Locations W-11 and MPHS-20) were not analyzed due to overloading of particulates.
- Fresh Kills (Dec 28, 0756 - 2143) - Asbestos
 - All 18 samples analyzed were below the TEM AHERA standard.
 - 1 sample (Location O-18) was not collected due to equipment malfunction.
- Fresh Kills (Dec 20) - Particulate Monitoring (Dataram)
 - Nothing of significance reported at two stations (P-1 and P-8) based on daily average concentrations.
- Fresh Kills (Dec 27) - Particulate Monitoring (Dataram)
 - Increased readings noted at one (P-1) of three stations (P-1, P-2, and P-3) based on daily average concentrations.
- Fresh Kills (Dec 28) - Particulate Monitoring (Dataram)
 - Nothing of significance reported at three stations (P-1, P-2, P-3) based on daily average concentrations.
- Fresh Kills (Dec 29) - Particulate Monitoring (Dataram)
 - Nothing of significance reported at three stations (P-1, P-2, P-3) based on daily average concentrations.
- Fresh Kills (Dec 30) - Particulate Monitoring (Dataram)
 - Increased readings noted at one (P-1) of three stations (P-1, P-2, and P-3) based on daily average concentrations.

Ambient Air Sampling Locations

- NYC / ER (Dec 21) - Particulate Monitoring (TEOM PM_{2.5})
 - Park Row (Site 1) - 24-hr average concentration for this period was **7.20 ug/m³**.
 - Chambers St./West St. (Site 2) - 24-hour average concentration for this period was **7.75 ug/m³**.
 - Coast Guard Building - Battery Park (Site 3) - 24-hour average concentrations for this period was **6.12 ug/m³**.
 - Wall Street - 24-hour average concentrations for this period was **8.86 ug/m³**.
 - All readings below the National Ambient Air Quality Standard for PM_{2.5} (65 ug/m³).
- NYC / ER (Dec 21) - Particulate Monitoring (TEOM PM₁₀)
 - Wall Street - 24-hour average concentrations for this period was **24.83 ug/m³**.
 - All readings below the National Ambient Air Quality Standard for PM₁₀ (150 ug/m³).
- NYC / ER (Dec 22) - Particulate Monitoring (TEOM PM_{2.5})
 - Park Row (Site 1) - 24-hr average concentration for this period was **7.92 ug/m³**.
 - Chambers St./West St. (Site 2) - 24-hour average concentration for this period was **10.58 ug/m³**.
 - Coast Guard Building - Battery Park (Site 3) - 24-hour average concentrations for this period was **6.31 ug/m³**.
 - Wall Street - 24-hour average concentrations for this period was **11.53 ug/m³**.
 - All readings below the National Ambient Air Quality Standard for PM_{2.5} (65 ug/m³).
- NYC / ER (Dec 22) - Particulate Monitoring (TEOM PM₁₀)
 - Wall Street - 24-hour average concentrations for this period was **23.47 ug/m³**.
 - All readings below the National Ambient Air Quality Standard for PM₁₀ (150 ug/m³).
- NYC / ER (Dec 23) - Particulate Monitoring (TEOM PM_{2.5})
 - Park Row (Site 1) - 24-hr average concentration for this period was **13.34 ug/m³**.
 - Chambers St./West St. (Site 2) - 24-hour average concentration for this period was **14.64 ug/m³**.
 - Coast Guard Building - Battery Park (Site 3) - 24-hour average concentrations for this period was **13.42 ug/m³**.
 - Wall Street - 24-hour average concentrations for this period was **15.10 ug/m³**.
 - All readings below the National Ambient Air Quality Standard for PM_{2.5} (65 ug/m³).
- NYC / ER (Dec 23) - Particulate Monitoring (TEOM PM₁₀)
 - Wall Street - 24-hour average concentrations for this period was **23.89 ug/m³**.
 - All readings below the National Ambient Air Quality Standard for PM₁₀ (150 ug/m³).

- NYC / ER (Dec 24) - Particulate Monitoring (TEOM PM_{2.5})
 - Park Row (Site 1) - 24-hr average concentration for this period was **12.16 ug/m³**.
 - Chambers St./West St. (Site 2) - 24-hour average concentration for this period was **11.77 ug/m³**.
 - Coast Guard Building - Battery Park (Site 3) - 24-hour average concentrations for this period was **10.05 ug/m³**.
 - Wall Street - 24-hour average concentrations for this period was **11.23 ug/m³**.
 - All readings below the National Ambient Air Quality Standard for PM_{2.5} (65 ug/m³).
- NYC / ER (Dec 24) - Particulate Monitoring (TEOM PM₁₀)
 - Wall Street - 24-hour average concentrations for this period was **15.35 ug/m³**.
 - All readings below the National Ambient Air Quality Standard for PM₁₀ (150 ug/m³).
- NYC / ER (Dec 25) - Particulate Monitoring (TEOM PM_{2.5})
 - Park Row (Site 1) - 24-hr average concentration for this period was **7.58 ug/m³**.
 - Chambers St./West St. (Site 2) - 24-hour average concentration for this period was **7.31 ug/m³**.
 - Coast Guard Building - Battery Park (Site 3) - 24-hour average concentrations for this period was **6.94 ug/m³**.
 - Wall Street - 24-hour average concentrations for this period was **8.09 ug/m³**.
 - All readings below the National Ambient Air Quality Standard for PM_{2.5} (65 ug/m³).
- NYC / ER (Dec 25) - Particulate Monitoring (TEOM PM₁₀)
 - Wall Street - 24-hour average concentrations for this period was **11.03 ug/m³**.
 - All readings below the National Ambient Air Quality Standard for PM₁₀ (150 ug/m³).
- NYC / ER (Dec 26) - Particulate Monitoring (TEOM PM_{2.5})
 - Park Row (Site 1) - 24-hr average concentration for this period was **11.20 ug/m³**.
 - Chambers St./West St. (Site 2) - 24-hour average concentration for this period was **12.56 ug/m³**.
 - Coast Guard Building - Battery Park (Site 3) - 24-hour average concentrations for this period was **10.21 ug/m³**.
 - Wall Street - 24-hour average concentrations for this period was **14.06 ug/m³**.
 - All readings below the National Ambient Air Quality Standard for PM_{2.5} (65 ug/m³).
- NYC / ER (Dec 26) - Particulate Monitoring (TEOM PM₁₀)
 - Wall Street - 24-hour average concentrations for this period was **28.37 ug/m³**.
 - All readings below the National Ambient Air Quality Standard for PM₁₀ (150 ug/m³).

- NYC / ER (Dec 27) - Particulate Monitoring (TEOM PM_{2.5})
 - Park Row (Site 1) - 24-hr average concentration for this period was **14.92 ug/m³**.
 - Chambers St./West St. (Site 2) - 24-hour average concentration for this period was **11.96 ug/m³**.
 - Coast Guard Building - Battery Park (Site 3) - 24-hour average concentrations for this period was **10.15 ug/m³**.
 - Wall Street - 24-hour average concentrations for this period was **12.87 ug/m³**.
 - All readings below the National Ambient Air Quality Standard for PM_{2.5} (65 ug/m³).
- NYC / ER (Dec 27) - Particulate Monitoring (TEOM PM₁₀)
 - Wall Street - 24-hour average concentrations for this period was **21.38 ug/m³**.
 - All readings below the National Ambient Air Quality Standard for PM₁₀ (150 ug/m³).
- NYC / ER (Dec 28) - Particulate Monitoring (TEOM PM_{2.5})
 - Park Row (Site 1) - 24-hr average concentration for this period was **15.03 ug/m³**.
 - Chambers St./West St. (Site 2) - 24-hour average concentration for this period was **12.71 ug/m³**.
 - Coast Guard Building - Battery Park (Site 3) - 24-hour average concentrations for this period was **9.83 ug/m³**.
 - Wall Street - 24-hour average concentrations for this period was **12.78 ug/m³**.
 - All readings below the National Ambient Air Quality Standard for PM_{2.5} (65 ug/m³).
- NYC / ER (Dec 28) - Particulate Monitoring (TEOM PM₁₀)
 - Wall Street - 24-hour average concentrations for this period was **24.52 ug/m³**.
 - All readings below the National Ambient Air Quality Standard for PM₁₀ (150 ug/m³).
- NYC / ER (Dec 18 - 24) - Asbestos Monitoring (Particulate Monitoring Stations)
 - Monitoring sites include:
 - Park Row (Site 1)
 - Chambers St./West St. (Site 2)
 - Coast Guard Building: Battery Park (Site 3)
 - Public School 154: 333 East 135th St, Bronx (Site 5)
 - Intermediate School 143: 511 West 182nd St., Manhattan (Site 6)
 - Public School 274: 800 Bushwick Ave., Brooklyn (Site 7)
 - Public School 44: 80 Maple Parkway, Staten Island (Site 8)
 - Public School 199: 3290 - 48th Ave., Queens (Site 9)
 - During this period a total of 48 samples were collected from these monitoring sites.
 - All of the samples were below the TEM AHERA standard.
 - 2 samples (Site 6 on Dec. 18 and Site 9 on Dec. 23) were not collected due to equipment malfunctions.
 - 6 locations (Sites 6 and 7 on Dec. 21, Sites 3, 7, and 8 on Dec. 23, and Site 3 on Dec. 24) were not sampled.

- NYC / ER (Dec 28) - Particulate Monitoring (Dataram)
 - Particulate levels noted at three locations (Stations L, N, R) were below the OSHA TWA.
 - Instruments operated approximately 6 hours.
 - Station L values ranged from 15.1 to 554.3 ug/m³ with an average of 41.6 ug/m³.
 - Station N values ranged from 8.4 to 100.0 ug/m³ with an average of 20.3 ug/m³.
 - Station R values ranged from 1.9 to 88.9 ug/m³ with an average of 23.9 ug/m³.
- NYC / ER (Dec 29) - Particulate Monitoring (Dataram)
 - Particulate levels noted at three locations (Stations L, N, R) were below the OSHA TWA.
 - Instruments operated approximately 6 hours.
 - Station L values ranged from 18.8 to 174.3 ug/m³ with an average of 35.4 ug/m³.
 - Station N values ranged from 14.2 to 131.2 ug/m³ with an average of 23.7 ug/m³.
 - Station R values ranged from 9.6 to 99.9 ug/m³ with an average of 23.2 ug/m³.
- NYC / ER (Dec 30) - Particulate Monitoring (Dataram)
 - Particulate levels noted at three locations (Stations L, N, R) were below the OSHA TWA.
 - Instruments operated approximately 6 to 6½ hours.
 - Station L values ranged from 0.1 to 139.4 ug/m³ with an average of 14.5 ug/m³.
 - Station N values ranged from 0.1 to 82.8 ug/m³ with an average of 13.7 ug/m³.
 - Station R values ranged from 1.2 to 53.2 ug/m³ with an average of 19.1 ug/m³.
- NYC / ER (Dec 25) - Volatile Organics (Mobile Laboratory)
 - Incorrectly noted in December 27 Sampling Situation Report that no samples were collected on this day.
 - Benzene exceeded OSHA TWA PEL (1 ppm) at one location (North Tower) in the debris area at ground level.
 - 2 of the 3 of the other samples (Washing Tent and Austin Tobin Plaza) did not note any benzene above the detection limit (20 ppbv).
- NYC / ER (Dec 28) - Volatile Organics (Mobile Laboratory)
 - Benzene did not exceed OSHA TWA PEL (1 ppm) at any of the four locations monitored, including in the debris area at ground level.
 - Benzene was not detected above the detection limit (ranging from 20 ppbv to 50 ppbv) in 3 of the 4 locations monitored (Washing Tent, Austin Tobin Plaza, South Tower), including in the debris area at ground level.
- NYC / ER (Dec 29) - Volatile Organics (Mobile Laboratory)

- Benzene did not exceed OSHA TWA PEL (1 ppm) at any of the four locations monitored, including in the debris area at ground level.
 - Benzene was not detected above the detection limit (20 ppbv) in 3 of the 4 locations monitored (Washing Tent, Austin Tobin Plaza, South Tower), including in the debris area at ground level.
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- NYC / ER (Dec 30) - Volatile Organics (Mobile Laboratory)
 - Benzene did not exceed OSHA TWA PEL (1 ppm) at any of the four locations monitored, including in the debris area at ground level.
 - Benzene was not detected above the detection limit (20 ppbv) in 3 of the 4 locations monitored (Washing Tent, Austin Tobin Plaza, South Tower), including in the debris area at ground level.

Direct Reading Instruments

- NYC / ER (Dec 28)
 - Nothing of significance reported.
- NYC / ER (Dec 29)
 - Nothing of significance reported.
- NYC / ER (Dec 30)
 - Nothing of significance reported.

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 12/20/01 1200 to 2359

Data Validation Date: 12/27/01

Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	PCM by NIOSH 7400			TEM (AHERA)			
					f/mm ²	f/cc		Structures (#)			S-f/cc**
12/20/01	RST-02187	L	720	Air	<7.0	<0.004		0.5µ - 5µ	5µ	S/mm ²	S-f/cc**
12/20/01	RST-02188	M1	720	Air	<7.0	<0.004		0	0	<8.89	<0.0048
12/20/01	RST-02189	N	36****	Air	<7.0	<0.075		0	0	<8.89	<0.0048
12/20/01	RST-02190	J	720	Air	8.92	0.005		0	0	<8.00	<0.0856
12/20/01	RST-02191	Q	720	Air	8.28	0.004		0	0	<8.89	<0.0048
12/20/01	RST-02192	F	720	Air	<7.0	<0.004		0	5***	44.44	0.0238
12/20/01	RST-02193	A	720	Air	<7.0	<0.004	1***	0	0	8.89	0.0048
12/20/01	RST-02194	B	720	Air	<7.0	<0.004		0	0	<8.89	<0.0048
12/20/01	RST-02195	C	710	Air	<7.0	<0.004		0	0	<8.89	<0.0048
12/20/01	RST-02196	H	720	Air	<7.0	<0.004		0	0	<8.89	<0.0048
12/20/01	RST-02197	I	526	Air	<7.0	<0.005		0	0	<8.00	<0.0059
12/20/01	RST-02198	D	720	Air	<7.0	<0.004		0	0	<8.89	<0.0048
12/20/01	RST-02199	K	720	Air	<7.0	<0.004		0	0	<8.89	<0.0048
12/20/01	RST-02200	T	720	Air	<7.0	<0.004		0	0	<8.89	<0.0048
12/20/01	RST-02201	T-Duplicate	720	Air	<7.0	<0.004		0	0	<8.89	<0.0048
12/20/01	RST-02202	U	568	Air	<7.0	<0.005		0	0	<8.00	<0.0054
12/20/01	RST-02203	U-Duplicate	720	Air	<7.0	<0.004		0	0	<8.89	<0.0048
12/20/01	RST-02204	V	720	Air	<7.0	<0.004		0	0	<8.89	<0.0048
12/20/01	RST-02205	S	720	Air	<7.0	<0.004		0	0	<8.89	<0.0048
12/20/01	RST-02206	P	720	Air	<7.0	<0.004		0	0	<8.89	<0.0048
12/20/01	RST-02207	E	720	Air	<7.0	<0.004		0	0	<8.89	<0.0048
12/20/01	RST-02208	W	720	Air	<7.0	<0.004		0	0	<8.89	<0.0048
12/21/01	FB122101	Field Blank	0	Air	<7.0	n/a		NA ⁽²⁾	NA ⁽²⁾	NA ⁽²⁾	NA ⁽²⁾
12/21/01	TB122101	Trip Blank	0	Air	<7.0	n/a		NA ⁽²⁾	NA ⁽²⁾	NA ⁽²⁾	NA ⁽²⁾

Sampling Locations:

A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant Hgh), access to TAGA bus area

M: Western end of Harrison St. at West St.

(on tree next to bulkhead)

M1: West St. - 50 yards south of Harrison St. at bulkhead

N: South side of Pier 25 (next to volleyball ct)

P: NE corner of South End Ave. & Albany

Q: Barclay & West St. (center island) in

proximity to USCG command post

R: TAGA Bus Location

S: Rector & South End

T: Pier 6 Heliport

U: Pier 6 Exit 2

V: Pier 6 Bus Sign

W: Wash Tent Common Area

Key:

* Sample volume (liters) is below recommended limit for the TEM method;

** Structure (S) is roughly equivalent to fiber (f)

*** Chrysotile

**** Extremely low sample volume collected.

NA⁽¹⁾ - Not analyzed due to overloading of

particulates

NA⁽²⁾ - Not analyzed for TEM

n/a - Not applicable

NR - Not requested

NS - Sample not submitted at this time

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

**NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 12/22/01 0001 to 1200**

Data Validation Date: 12/26/01

Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	PCM by NIOSH 7400		TEM (AHERA)		
					f/mm ²	f/cc	Structures (#) 0.5µ - 5µ	S/mm ²	S-f/cc**
12/22/01	RST-02251	L	720	Air	<7.0	<0.004	0	<8.89	<0.0048
12/22/01	RST-02252	M-1	620	Air	<7.0	<0.004	0	<8.00	<0.0050
12/22/01	RST-02253	N	680	Air	<7.0	<0.004	0	<8.00	<0.0045
12/22/01	RST-02254	J	720	Air	<7.0	<0.004	0	<8.89	<0.0048
12/22/01	RST-02255	Q	720	Air	<7.0	<0.004	0	<8.89	<0.0048
12/22/01	RST-02256	F	720	Air	<7.0	<0.004	0	<8.89	<0.0048
12/22/01	RST-02257	A	720	Air	<7.0	<0.004	0	<8.89	<0.0048
12/22/01	RST-02258	B	720	Air	<7.0	<0.004	0	<8.89	<0.0048
12/22/01	RST-02259	C	720	Air	<7.0	<0.004	0	<8.89	<0.0048
12/22/01	RST-02260	H	716	Air	8.92	0.005	0	<8.89	<0.0048
12/22/01	RST-02261	I	696	Air	<7.0	<0.004	0	<8.89	<0.0049
12/22/01	RST-02262	I-Duplicate	691	Air	10.19	0.006	0	<8.00	<0.0045
12/22/01	RST-02263	D	720	Air	<7.0	<0.004	0	<8.89	<0.0048
12/22/01	RST-02264	K	720	Air	<7.0	<0.004	0	<8.89	<0.0048
12/22/01	-	T	NS	Air	NS	NS	NS	NS	NS
12/22/01	RST-02265	U	720	Air	<7.0	<0.004	0	<8.89	<0.0048
12/22/01	RST-02266	V	720	Air	<7.0	<0.004	0	<8.89	<0.0048
12/22/01	RST-02267	S	720	Air	<7.0	<0.004	0	<8.89	<0.0048
12/22/01	RST-02268	P	710	Air	<7.0	<0.004	0	<8.89	<0.0048
12/22/01	RST-02269	E	720	Air	<7.0	<0.004	0	<8.89	<0.0048
12/22/01	RST-02270	E-Duplicate	720	Air	<7.0	<0.004	0	<8.89	<0.0048
12/22/01	RST-02271	W	636	Air	7.64	0.005	0	<8.00	<0.0048
12/22/01	FB122201	Field Blank	0	Air	<7.0	n/a	NA ⁽²⁾	NA ⁽²⁾	NA ⁽²⁾
12/22/01	TB122201	Trip Blank	0	Air	<7.0	n/a	NA ⁽²⁾	NA ⁽²⁾	NA ⁽²⁾

Sampling Locations:

A: NE corner of West Broadway & Barclay
 B: SE corner of Church & Dey St.
 C: Trinity (a.k.a. Church) & Liberty
 C1: SW corner of Broadway & Liberty St.
 D: East end of Albany St. at Greenwich St.
 E: Western end of Liberty St. at South End Ave
 F: Northern median strip of Vesey & West St
 G: Church and Duane St.
 H: South side of Chase Manhattan Plaza at Pine St.
 I: SE corner of Wall St. & Broadway
 J: NE corner of Warren & West St.
 K: West St. & Albany in median strip
 L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area

M: Western end of Harrison St. at West St.
 (on tree next to bulkhead)

M1: West St. - 50 yards south of Harrison St. at bulkhead

N: South side of Pier 25 (next to volleyball ct)

P: NE corner of South End Ave. & Albany

Q: Barclay & West St. (center island) in proximity to USCG command post

R: TAGA Bus Location

S: Rector & South End

T: Pier 6 Helipad

U: Pier 6 Exit 2

V: Pier 6 Bus Sign

W: Wash Tent Common Area

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94

Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)

Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

Key:

* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading.

** Structure (S) is roughly equivalent to fiber (f)

*** Chrysotile

NA⁽¹⁾ - Not analyzed due to overloading of particulates

NA⁽²⁾ - Not analyzed for TEM

n/a - Not applicable

NR - Not requested

NS - Sample not submitted at this time

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 12/20/01 0842 to 2158

Data Validation Date: 12/22/2001

Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	PCM by NIOSH 7400		TEM (AHERA)			
					f/mm ²	f/cc	Structures (#)	S/mm ²	S-f/cc**	
12/20/01	LF01691	P-1	720	Air	<7.0	<0.004	0.5µ - 5µ	<8.75	<0.0047	
12/20/01	LF01692	P-2	531	Air	<7.0	<0.005	0	<8.75	<0.0063	
12/20/01	LF01693	P-3	720	Air	<7.0	<0.004	0	<8.75	<0.0047	
12/20/01	LF01694	P-4	720	Air	<7.0	<0.004	0	<8.75	<0.0047	
12/20/01	LF01695	P-5	720	Air	<7.0	<0.004	0	<8.75	<0.0047	
12/20/01	LF01696	P-6	NS	Air	NS	NS	NS	NS	NS	
12/20/01	LF01697	P-7	720	Air	<7.0	<0.004	0	<8.75	<0.0047	
12/20/01	LF01698	P-8	720	Air	<7.0	<0.004	0	<8.75	<0.0047	
12/20/01	LF01699	W-11	720	Air	11.46	0.006	0	8.75	0.0047	
12/20/01	LF01700	W-12A	720	Air	11.46	0.006	4***	35.00	0.0187	
12/20/01	LF01701	W-12B	720	Air	<7.0	<0.004	2***	17.50	0.0094	
12/20/01	LF01702	B-13	720	Air	<7.0	<0.004	0	<8.75	<0.0047	
12/20/01	LF01703	B-14	720	Air	<7.0	<0.004	0	<8.75	<0.0047	
12/20/01	LF01704	T-15	720	Air	<7.0	<0.004	0	<8.75	<0.0047	
12/20/01	LF01705	T-16	720	Air	7.64	0.004	1***	17.50	0.0094	
12/20/01	LF01706	O-17	720	Air	<7.0	<0.004	0	<8.75	<0.0047	
12/20/01	LF01707	O-18	720	Air	<7.0	<0.004	0	<8.75	<0.0047	
12/20/01	LF01708	O-19	720	Air	<7.0	<0.004	0	<8.75	<0.0047	
12/20/01	LF01709	MPHS-20	720	Air	<7.0	<0.004	0	<8.75	<0.0047	
12/20/01	LF01710	Lot Blank	0	Air	<7.0	n/a	0	NA ⁽²⁾	NA ⁽²⁾	
12/20/01	LF01711	Trip Blank	0	Air	<7.0	n/a	0	NA ⁽²⁾	NA ⁽²⁾	

Key:

* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading

** Structure (S) is roughly equivalent to fiber (f)

*** Chrysotile

NA ⁽¹⁾ - Not analyzed due to overloading of particulates

NA ⁽²⁾ - Not analyzed for TEM

n/a - Not applicable

NC - Sample not collected

NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

NYC Response

Asbestos Air Sampling Results for WTC Extended Network

Sampling Date and Time: 12/20/01 1200 to 2400

Data Validation Date: 12/26/2001

Sampling Date	Sample No.	Sampling Location	Sample Volume (L)**	Matrix	PCM by NIOSH 7400		TEM (AHERA)			
					f/mm ²	f/cc	Structures (#)		S/mm ²	S-f/cc*
							0.5µ - 5µ	5µ		
12/20/01	7093-18-0084	Park Row	1340	Air	<7.0	<0.002	0	0	<16.00	<0.0046
12/20/01	7093-19-0084	Chambers Street	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
12/20/01	7093-20-0084	Coast Guard	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
12/20/01	7093-15-0083	Manhattan PS #143	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
12/20/01	7094-09-0073	Bronx PS #154	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
12/20/01	7096-12-0078	Queens PS #199	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
12/20/01	7095-98-0080	Brooklyn PS #274	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
12/20/01	7097-18-0076	Staten Island PS #44	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043

Key:

- *Structure (S) roughly equivalent to fiber (f)
- ** Sample volume is based on pump reading
- *** Sample volume is below recommended limit for TEM analysis
- **** Chrysotile
- NR - analysis not requested
- NS - Sample not submitted for analysis
- n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 12/26/01 0001 to 1200

Data Validation Date: 12/30/01

Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	PCM by NIOSH 7400		TEM (AHERA)			
					f/mm ²	f/cc	Structures (#)		S/mm ²	S-f/cc**
12/26/01	RST-02417	L	688	Air	<7.0	<0.004	0.5µ	5µ	<8.00	<0.0045
12/26/01	RST-02418	M-1	720	Air	<7.0	<0.004	1***	0	8.89	0.0048
12/26/01	RST-02419	N	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/26/01	RST-02420	J	668	Air	<7.0	<0.004	0	0	<8.00	<0.0046
12/26/01	RST-02421	Q	680	Air	<7.0	<0.004	3***	1***	32.00	0.0181
12/26/01	RST-02422	F	720	Air	<7.0	<0.004	4***	0	35.56	0.0190
12/26/01	RST-02423	A	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/26/01	RST-02424	B	652	Air	<7.0	<0.004	1***	0	8.00	0.0047
12/26/01	RST-02425	B-Dup	718	Air	<7.0	<0.004	2***	0	17.78	0.0095
12/26/01	RST-02426	C	720	Air	<7.0	<0.004	1***	0	8.89	0.0048
12/26/01	RST-02427	H	720	Air	<7.0	<0.004	1***	0	8.89	0.0048
12/26/01	RST-02428	I	720	Air	<7.0	<0.004	1***	0	8.89	0.0048
12/26/01	RST-02429	D	720	Air	<7.0	<0.004	1***	2***	26.67	0.0143
12/26/01	RST-02430	K	669	Air	<7.0	<0.004	0	0	<8.00	<0.0046
12/26/01	RST-02431	U	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/26/01	RST-02432	V	446	Air	<7.0	<0.006	0	0	<8.00	<0.0069
12/26/01	RST-02433	S	668	Air	<7.0	<0.004	0	0	<8.00	<0.0046
12/26/01	RST-02434	P	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/26/01	RST-02435	E	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/26/01	RST-02436	W	518	Air	<7.0	<0.005	1***	0	8.00	0.0059
12/26/01	FB122601	Field Blank	0	Air	<7.0	n/a	NA ⁽²⁾	NA ⁽²⁾	NA ⁽²⁾	NA ⁽²⁾
12/26/01	TB122601	Trip Blank	0	Air	<7.0	n/a	NA ⁽²⁾	NA ⁽²⁾	NA ⁽²⁾	NA ⁽²⁾

Sampling Locations:

A: NE corner of West Broadway & Barclay
 B: SE corner of Church & Dey St.
 C: Trinity (a.k.a. Church) & Liberty
 C1: SW corner of Broadway & Liberty St.
 D: East end of Albany St. at Greenwich St.
 E: Western end of Liberty St. at South End Ave
 F: Northern median strip of Vesey & West St
 G: Church and Duane St.
 H: South side of Chase Manhattan Plaza at Pine St.
 I: SE corner of Wall St. & Broadway
 J: NE corner of Warren & West St.
 K: West St. & Albany in median strip
 L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area

M: Western end of Harrison St. at West St.
 (on tree next to bulkhead)

M1: West St. - 50 yards south of Harrison St. at bulkhead

N: South side of Pier 25 (next to volleyball ct)

P: NE corner of South End Ave. & Albany

Q: Barclay & West St. (center island) in proximity to USCG command post

R: TAGA Bus Location

S: Rector & South End

T: Pier 6 Helipoint

U: Pier 6 Exit 2

V: Pier 6 Bus Sign

W: Wash Tent Common Area

Key:

* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading

** Structure (S) is roughly equivalent to fiber (f)

*** Chrysotile

**** Extremely low sample volume collected

NA⁽¹⁾ - Not analyzed due to overloading of particulates

NA⁽²⁾ - Not analyzed for TEM

n/a - Not applicable

NR - Not requested

NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
 Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
 Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 12/23/01 0810 to 2145

Data Validation Date: 12/28/2001

Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	PCM by NIOSH 7400		TEM (AHERA)			
					f/mm ²	f/cc	Structures (#)	S/mm ²	S-f/cc**	
12/23/01	LF01753	P-1	720	Air	<7.0	<0.004	0	<8.75	<0.0047	
12/23/01	LF01754	P-2	720	Air	<7.0	<0.004	0	<8.75	<0.0047	
12/23/01	LF01755	P-3	720	Air	<7.0	<0.004	0	<8.75	<0.0047	
12/23/01	LF01756	P-4	720	Air	<7.0	<0.004	0	<8.75	<0.0047	
12/23/01	LF01757	P-5	720	Air	<7.0	<0.004	0	<8.75	<0.0047	
12/23/01	LF01758	P-6	720	Air	<7.0	<0.004	0	<8.75	<0.0047	
12/23/01	LF01759	P-7	720	Air	<7.0	<0.004	0	<8.75	<0.0047	
12/23/01	LF01760	P-8	720	Air	<7.0	<0.004	0	<8.75	<0.0047	
12/23/01	LF01761	W-11	NS ⁽¹⁾	NS ⁽¹⁾	NS ⁽¹⁾	NS ⁽¹⁾	NS ⁽¹⁾	NS ⁽¹⁾	NS ⁽¹⁾	
12/23/01	LF01762	W-12A	720	Air	15.29	0.008	0	<8.75	<0.0047	
12/23/01	LF01763	W-12B	720	Air	7.64	0.004	0	<8.75	<0.0047	
12/23/01	LF01764	B-13	720	Air	<7.0	<0.004	0	<8.75	<0.0047	
12/23/01	LF01765	B-14	720	Air	<7.0	<0.004	0	<8.75	<0.0047	
12/23/01	LF01766	T-15	720	Air	<7.0	<0.004	0	<8.75	<0.0047	
12/23/01	LF01767	T-16	720	Air	26.75	0.014	0	<8.75	<0.0047	
12/23/01	LF01768	O-17	NS ⁽²⁾	NS ⁽²⁾	NS ⁽²⁾	NS ⁽²⁾	NS ⁽²⁾	NS ⁽²⁾	NS ⁽²⁾	
12/23/01	LF01769	O-18	720	Air	<7.0	<0.004	0	<8.75	<0.0047	
12/23/01	LF01770	MPHS-20	110****	Air	<7.0	<0.025	0	<8.75	<0.0306	
12/23/01	LF01771	Lot Blank	0	Air	<7.0	n/a	NA ⁽²⁾	NA ⁽²⁾	NA ⁽²⁾	
12/23/01	LF01772	Trip Blank	0	Air	<7.0	n/a	NA ⁽²⁾	NA ⁽²⁾	NA ⁽²⁾	

Key:

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** Structure (S) is roughly equivalent to fiber (f)

*** Chrysotile

**** Extremely low sample volume collected

NA⁽¹⁾ - Not analyzed due to overloading of particulates

NA⁽²⁾ - Not analyzed for TEM

n/a - Not applicable

NC - Sample not collected

NS⁽¹⁾ - Sample not submitted due to no sample volume

NS⁽²⁾ - Sample not submitted at this time due to no access to station location

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

**NYC Response
Asbestos Air Sampling Results for WTC Extended Network
Sampling Date and Time: 12/23/01 1200 to 2400**

Data Validation Date: 12/30/2001

Sampling Date	Sample No.	Sampling Location	Sample Volume (L)	Matrix	PCM by NIOSH 7400		TEM (AHERA)			
					f/mm ²	f/cc	Structures (#)			S-f/cc*
							0.5µ - 5µ	5µ	S/mm ²	
12/23/01	7093-18-0087	Park Row	1234	Air	<7.0	<0.002	0	0	<13.33	<0.0042
12/23/01	7093-19-0087	Chambers Street	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
-	-	Coast Guard	NS	Air	NS	NS	NS	NS	NS	NS
12/23/01	7093-15-0085	Manhattan IS #143	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
12/23/01	7094-09-0076	Bronx PS #154	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
12/23/01	7096-12-0081	Queens PS #199	NR	Air	NR	NR	NR	NR	NR	NR
-	-	Brooklyn PS #274	NS	Air	NS	NS	NS	NS	NS	NS
-	-	Staten Island PS #44	NS	Air	NS	NS	NS	NS	NS	NS

Key:

- *Structure (S) roughly equivalent to fiber (f)
- ** Sample volume is based on pump reading
- *** Sample volume is below recommended limit for TEM analysis
- **** Chrysotile
- NR - analysis not requested
- NS - Sample not submitted for analysis
- n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

ext-12-23-01pm

**NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 12/26/01 0758 to 2205**

Data Validation Date: 12/30/2001

Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	PCM by NIOSH 7400		TEM (AHERA)			
					f/mm ²	f/cc	Structures (#) 0.5µ - 5µ	5µ	S/mm ²	S-f/cc**
12/26/01	LF01793	P-1	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/26/01	LF01794	P-2	578	Air	10.19	0.007	1***	0	8.75	0.0058
12/26/01	LF01795	P-3	720	Air	7.84	0.004	0	0	<8.75	<0.0047
12/26/01	LF01796	P-4	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/26/01	LF01797	P-5	720	Air	7.64	0.004	0	0	<8.75	<0.0047
12/26/01	LF01798	P-6	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/26/01	LF01799	P-7	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/26/01	LF01800	P-8	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/26/01	LF01801	W-11	720	Air	10.19	0.005	0	1****	8.75	0.0047
12/26/01	LF01802	W-12A	720	Air	20.38	0.011	0	0	<8.75	<0.0047
12/26/01	LF01803	W-12B	720	Air	9.55	0.005	0	0	<8.75	<0.0047
12/26/01	LF01804	B-13	720	Air	12.74	0.007	2***	0	17.50	0.0094
-	LF01805	B-14	NS	Air	NS	NS	NS	NS	NS	NS
12/26/01	LF01806	T-15	720	Air	14.65	0.008	0	0	<8.75	<0.0047
12/26/01	LF01807	T-16	720	Air	14.01	0.0075	0	1***	8.75	0.0047
12/26/01	LF01808	O-17	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/26/01	LF01809	O-18	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/26/01	LF01810	O-19	533	Air	<7.0	<0.004	0	0	<8.75	<0.0063
12/26/01	LF01811	MPHS-20	707	Air	7.64	0.004	0	0	<8.75	<0.0048
12/26/01	LF01812	Lot Blank	0	Air	<7.0	n/a	0	0	NA ⁽²⁾	NA ⁽²⁾
12/26/01	LF01813	Trip Blank	0	Air	<7.0	n/a	0	0	NA ⁽²⁾	NA ⁽²⁾

Key:

* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading

** Structure (S) is roughly equivalent to fiber (f)

*** Chrysotile

**** Amosite

NA ⁽¹⁾ - Not analyzed due to overloading of particulates

NA ⁽²⁾ - Not analyzed for TEM

n/a - Not applicable

NC - Sample not collected

NS - Sample not submitted

**NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)**

**NYC Response
Asbestos Air Sampling Results for WTC Extended Network
Sampling Date and Time: 12/24/01 1200 to 2400^(a)**

Data Validation Date: 12/30/2001

					PCM by NIOSH 7400		TEM (AHERA)				
Sampling Date	Sample No.	Sampling Location	Sample Volume (L)**	Matrix	f/mm ²	f/cc	Structures (#)			S/mm ²	S~f/cc*
							0.5µ - 5µ	5µ			
12/24/01	7093-18-0088	Park Row	1256	Air	<7.0	<0.002	0	0		<16.00	<0.0049
12/24/01	7093-19-0088	Chambers Street	1440	Air	<7.0	<0.002	0	0		<16.00	<0.0043
12/24/01	7093-20-	Coast Guard	NS	NS	NS	NS	NS	NS		NS	NS
12/24/01	7093-15-0086	Manhattan IS #143	1440	Air	<7.0	<0.002	0	0		<16.00	<0.0043
12/24/01	7094-09-0077	Bronx PS #154	1440	Air	<7.0	<0.002	0	0		<16.00	<0.0043
12/24/01	7096-12-0082	Queens PS #199	1440	Air	<7.0	<0.002	0	0		<16.00	<0.0043
12/23/01	7095-98-0082 ^(a)	Brooklyn PS #274	1208	Air	<7.0	<0.002	0	0		<16.00	<0.0051
12/23/01	7097-18-0079 ^(a)	Staten Island PS #44	1440	Air	<7.0	<0.002	0	0		<16.00	<0.0043

Key:

*Structure (S) roughly equivalent to fiber (f)

** Sample volume is based on pump reading

*** Sample volume is below recommended limit for TEM analysis

**** Chrysotile

NR - analysis not requested

NS - Sample not submitted for analysis

n/a - Not applicable

^(a) - Sample 7095-98-0082 (Brooklyn PS #274) was collected 12/23/01 1200 to 2204

Sample 7097-18-0079 (Staten Island PS #44) was collected 12/23/01 1200 to 2400

**NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)**

ext-12-24-01pm

Daily DataRam Particulate Monitoring Summary Sheet
Staten Island Landfill
December 28, 2001

Location	Longitude	Latitude	DataRam ID	Tag #	Logged Points	Elapsed Time	Avg. Time (sec)	Logging Periods	Calibration Factor	STEL ug/m3	Min. Conc. ug/m3	Avg. Conc. ug/m3	Max. Conc. ug/m3
1	-74.199795	40.565139	2226	1	45	11:15:00	10	00:15:00	100	0.0	8.8	35.1	616.5
2	-74.198262	40.566883	2295	1	45	11:15:00	10	00:15:00	100	0.0	0.1	40.2	1015.6
3	-74.198685	40.570054	2011	1	45	11:15:00	10	00:15:00	100	0.0	0.0	40.8	615.8
4	-74.201380	40.569790	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
5	-74.205873	40.568892	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
6	-74.207406	40.563818	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
7	-74.205414	40.560434	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
8	-74.203019	40.561915	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0

Daily DataRam Particulate Monitoring Summary Sheet
Staten Island Landfill
December 28, 2001

Location	Longitude	Latitude	DataRam ID	Tag #	Logged Points	Elapsed Time	Avg. Time (sec)	Logging Periods	Calibration Factor	STEL ug/m3	Min. Conc. ug/m3	Avg. Conc. ug/m3	Max. Conc. ug/m3
1	-74.199795	40.565139	2226	1	45	11:15:00	10	00:15:00	100	0.0	8.8	35.1	616.5
2	-74.198262	40.566883	2295	1	45	11:15:00	10	00:15:00	100	0.0	0.1	40.2	1015.6
3	-74.198685	40.570054	2011	1	45	11:15:00	10	00:15:00	100	0.0	0.0	40.8	615.8
4	-74.201380	40.569790	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
5	-74.205873	40.568892	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
6	-74.207406	40.563818	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
7	-74.205414	40.560434	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
8	-74.203019	40.561915	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0

NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 12/25/01

File Name	NYC569	NYC570	NYC571	NYC572	NYC574	NYC575
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent Ambient Air	Austin Tobin Plaza	North Tower Plume	South Tower Plume
Sample Number			A07264	A07267	A07265	A07266
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	50 mL	100 mL
Reporting Limit (RL)	20	20	20	20	100	50
Sample Conc. Units	ppb _v	ppb _v	ppb _v	ppb _v	ppb _v	ppb _v
Propylene	RL	RL	RL	RL	1700	330
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	910	280
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	320	34	RL	230
Acetone	RL	RL	360	140	3200	4100
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	98
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	110	57
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	26	660	290
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	290	70
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	3700	390
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	40	RL	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	110
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	1400	260
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	1300	130
m&p-Xylenes	RL	RL	RL	RL	190	130
O-Xylene	RL	RL	RL	RL	RL	53
Styrene	RL	RL	RL	RL	320	200
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

NYC Response
Asbestos Air Sampling Results for WTC Extended Network
Sampling Date and Time: 12/23/01 1200 to 2400

Data Validation Date: 12/30/2001

Sampling Date	Sample No.	Sampling Location	Sample Volume (L)**	Matrix	PCM by NIOSH 7400		TEM (AHERA)				
					f/mm ²	f/cc	Structures (#)		S/mm ²	S~f/cc*	
							0.5µ - 5µ	5µ			
12/23/01	7093-18-0087	Park Row	1234	Air	<7.0	<0.002	0	0	<13.33	<0.0042	
12/23/01	7093-19-0087	Chambers Street	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043	
-	-	Coast Guard	NS	Air	NS	NS	NS	NS	NS	NS	
12/23/01	7093-15-0085	Manhattan IS #143	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043	
12/23/01	7094-09-0076	Bronx PS #154	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043	
12/23/01	7096-12-0081	Queens PS #199	NR	Air	NR	NR	NR	NR	NR	NR	
-	-	Brooklyn PS #274	NS	Air	NS	NS	NS	NS	NS	NS	
-	-	Staten Island PS #44	NS	Air	NS	NS	NS	NS	NS	NS	

Key:

- *Structure (S) roughly equivalent to fiber (f)
- ** Sample volume is based on pump reading
- *** Sample volume is below recommended limit for TEM analysis
- **** Chrysotile
- NR - analysis not requested
- NS - Sample not submitted for analysis
- n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

ext-12-23-01pm

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 12/26/01 0758 to 2205

Data Validation Date: 12/30/2001

Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	PCM by NIOSH 7400		TEM (AHERA)			
					f/mm ²	f/cc	Structures (#)	S/mm ²	S-f/cc**	
12/26/01	LF01793	P-1	720	Air	<7.0	<0.004	0	<8.75	<0.0047	
12/26/01	LF01794	P-2	578	Air	10.19	0.007	1***	8.75	0.0058	
12/26/01	LF01795	P-3	720	Air	7.64	0.004	0	<8.75	<0.0047	
12/26/01	LF01796	P-4	720	Air	<7.0	<0.004	0	<8.75	<0.0047	
12/26/01	LF01797	P-5	720	Air	7.64	0.004	0	<8.75	<0.0047	
12/26/01	LF01798	P-6	720	Air	<7.0	<0.004	0	<8.75	<0.0047	
12/26/01	LF01799	P-7	720	Air	<7.0	<0.004	0	<8.75	<0.0047	
12/26/01	LF01800	P-8	720	Air	<7.0	<0.004	0	<8.75	<0.0047	
12/26/01	LF01801	W-11	720	Air	10.19	0.005	0	8.75	0.0047	
12/26/01	LF01802	W-12A	720	Air	20.38	0.011	0	<8.75	<0.0047	
12/26/01	LF01803	W-12B	720	Air	9.55	0.005	0	<8.75	<0.0047	
12/26/01	LF01804	B-13	720	Air	12.74	0.007	2***	17.50	0.0094	
-	LF01805	B-14	NS	Air	NS	NS	NS	NS	NS	
12/26/01	LF01806	T-15	720	Air	14.65	0.008	0	<8.75	<0.0047	
12/26/01	LF01807	T-16	720	Air	14.01	0.0075	0	8.75	0.0047	
12/26/01	LF01808	O-17	720	Air	<7.0	<0.004	0	<8.75	<0.0047	
12/26/01	LF01809	O-18	720	Air	<7.0	<0.004	0	<8.75	<0.0047	
12/26/01	LF01810	O-19	533	Air	<7.0	<0.004	0	<8.75	<0.0063	
12/26/01	LF01811	MPHS-20	707	Air	7.64	0.004	0	<8.75	<0.0048	
12/26/01	LF01812	Lot Blank	0	Air	<7.0	n/a	0	NA ⁽²⁾	NA ⁽²⁾	
12/26/01	LF01813	Trip Blank	0	Air	<7.0	n/a	0	NA ⁽²⁾	NA ⁽²⁾	

Key:

* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading

** Structure (S) is roughly equivalent to fiber (f)

*** Chrysotile

**** Amosite

NA ⁽¹⁾ - Not analyzed due to overloading of particulates

NA ⁽²⁾ - Not analyzed for TEM

n/a - Not applicable

NC - Sample not collected

NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

NYC Response

Asbestos Air Sampling Results for WTC Extended Network

Sampling Date and Time: 12/24/01 1200 to 2400^(a) Data Validation Date: 12/30/2001

Sampling Date	Sample No.	Sampling Location	Sample Volume (L)**	Matrix	PCM by NIOSH 7400			TEM (AHERA)			
					f/mm ²	f/cc		Structures (#)			S-f/cc*
								0.5µ - 5µ	5µ	S/mm ²	
12/24/01	7093-18-0088	Park Row	1256	Air	<7.0	<0.002		0	0	<16.00	<0.0049
12/24/01	7093-19-0088	Chambers Street	1440	Air	<7.0	<0.002		0	0	<16.00	<0.0043
12/24/01	7093-20-	Coast Guard	NS	NS	NS	NS		NS	NS	NS	NS
12/24/01	7093-15-0086	Manhattan IS #143	1440	Air	<7.0	<0.002		0	0	<16.00	<0.0043
12/24/01	7094-09-0077	Bronx PS #154	1440	Air	<7.0	<0.002		0	0	<16.00	<0.0043
12/24/01	7096-12-0082	Queens PS #199	1440	Air	<7.0	<0.002		0	0	<16.00	<0.0043
12/23/01	7095-98-0082 ^(a)	Brooklyn PS #274	1208	Air	<7.0	<0.002		0	0	<16.00	<0.0051
12/23/01	7097-18-0079 ^(a)	Staten Island PS #44	1440	Air	<7.0	<0.002		0	0	<16.00	<0.0043

Key:

*Structure (S) roughly equivalent to fiber (f)

** Sample volume is based on pump reading

*** Sample volume is below recommended limit for TEM analysis

**** Chrysotile

NR - analysis not requested

NS - Sample not submitted for analysis

n/a - Not applicable

^(a) - Sample 7095-98-0082 (Brooklyn PS #274) was collected 12/23/01 1200 to 2204

Sample 7097-18-0079 (Staten Island PS #44) was collected 12/23/01 1200 to 2400

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94

Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)

Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

ext-12-24-01pm

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 12/19/01 1200 to 2359

Data Validation Date: 12/22/01

Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	PCM by NIOSH 7400		TEM (AHERA)		
					f/mm ²	f/cc	Structures (#)		S-f/cc**
12/19/01	RST-02143	L	720	Air	7.64	0.004	0.5µ - 5µ	5µ	S/mm ²
12/19/01	RST-02144	L-Dup	720	Air	<7.0	<0.004	0	0	<7.87
12/19/01	RST-02145	M-1	720	Air	10.19	0.005	0	0	<8.75
12/19/01	RST-02146	N	695	Air	<7.0	<0.004	0	0	<8.75
12/19/01	RST-02147	N-Dup	720	Air	7.64	0.004	0	0	<8.75
12/19/01	RST-02148	J	720	Air	<7.0	<0.004	0	0	<8.75
12/19/01	RST-02149	Q	720	Air	<7.0	<0.004	0	0	<8.75
12/19/01	RST-02150	F	720	Air	10.19	0.005	0	0	<8.75
12/19/01	RST-02151	A	720	Air	7.64	0.004	1***	0	8.75
12/19/01	RST-02152	B	720	Air	NA ⁽¹⁾	NA ⁽¹⁾	0	0	<8.75
12/19/01	RST-02153	C	720	Air	8.28	0.004	0	0	<8.75
12/19/01	RST-02154	H	1224*	Air	11.46	0.004	0	0	<15.75
12/19/01	RST-02155	I	720	Air	8.92	0.005	0	0	<8.75
12/19/01	RST-02156	D	720	Air	10.83	0.006	0	0	<8.75
12/19/01	RST-02157	K	720	Air	<7.0	<0.004	0	0	<8.75
12/19/01	RST-02158	T	720	Air	<7.0	<0.004	0	0	<8.75
12/19/01	RST-02159	U	720	Air	7.01	0.004	0	0	<8.75
12/19/01	RST-02160	V	720	Air	<7.0	<0.004	0	0	<8.75
12/19/01	RST-02161	S	662	Air	<7.0	<0.004	0	0	<8.75
12/19/01	RST-02162	P	720	Air	10.83	0.006	0	0	<8.75
12/19/01	RST-02163	E	1224*	Air	7.64	0.002	0	0	<8.75
12/19/01	RST-02164	W	463	Air	NS	NS	NS	NS	NS
12/20/01	FB122001	Field Blank	0	Air	<7.0	n/a	NA ⁽²⁾	NA ⁽²⁾	NA ⁽²⁾
12/20/01	TB122001	Trip Blank	0	Air	<7.0	n/a	NA ⁽²⁾	NA ⁽²⁾	NA ⁽²⁾

Sampling Locations:

A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area

M: Western end of Harrison St. at West St.
(on tree next to bulkhead)

M1: West St. - 50 yards south of Harrison St. at bulkhead

N: South side of Pier 25 (next to volleyball ct)

P: NE corner of South End Ave. & Albany

Q: Barclay & West St. (center island) in proximity to USCG command post

R: TAGA Bus Location

S: Rector & South End

T: Pier 6 Heliport

U: Pier 6 Exit 2

V: Pier 6 Bus Sign

W: Wash Tent Common Area

Key:

* Sample volume (liters) is below recommended limit for the TEM method, except for samples RST-02154 and RST-02163; volume is based on pump reading

** Structure (S) is roughly equivalent to fiber (f)

*** Chrysotile

NA⁽¹⁾ - Not analyzed due to overloading of particulates

NA⁽²⁾ - Not analyzed for TEM

n/a - Not applicable

NR - Not requested

NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

NYC Response

Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 12/21/01 0001 to 1200

Data Validation Date: 12/27/01

Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	PCM by NIOSH 7400		TEM (AHERA)			
					f/mm ²	f/cc	Structures (#)		S/mm ²	S-f/cc**
12/21/01	RST-02209	L	720	Air	<7.0	<0.004	0.5µ	5µ	<8.89	<0.0048
12/21/01	RST-02210	M-1	11****	Air	<7.0	<0.245	0	0	<8.00	<0.2800
12/21/01	RST-02211	N	687	Air	8.28	0.005	0	0	<8.00	<0.0045
12/21/01	RST-02212	J	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/21/01	RST-02213	Q	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/21/01	RST-02214	F	244	Air	<7.0	<0.011	0	0	<8.00	<0.0126
12/21/01	RST-02215	A	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/21/01	RST-02216	B	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/21/01	RST-02217	C	263	Air	<7.0	<0.010	0	0	<8.00	<0.0117
12/21/01	RST-02218	H	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/21/01	RST-02219	I	422	Air	<7.0	<0.006	0	0	<8.00	<0.0073
12/21/01	RST-02220	D	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/21/01	RST-02221	K	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/21/01	RST-02222	T	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/21/01	RST-02223	U	720	Air	<7.0	<0.004	0	2***	17.78	0.0095
12/21/01	RST-02224	V	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/21/01	-	V-Duplicate	NS	Air	NS	NS	NS	NS	NS	NS
12/21/01	RST-02225	S	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/21/01	RST-02226	S-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/21/01	RST-02227	P	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/21/01	RST-02228	E	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/21/01	RST-02229	W	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/21/01	FB122101	Field Blank	0	Air	<7.0	n/a	NA ⁽²⁾	NA ⁽²⁾	NA ⁽²⁾	NA ⁽²⁾
12/21/01	TB122101	Trip Blank	0	Air	<7.0	n/a	NA ⁽²⁾	NA ⁽²⁾	NA ⁽²⁾	NA ⁽²⁾

Sampling Locations:

A: NE corner of West Broadway & Barclay
 B: SE corner of Church & Dey St.
 C: Trinity (a.k.a. Church) & Liberty
 C1: SW corner of Broadway & Liberty St.
 D: East end of Albany St. at Greenwich St.
 E: Western end of Liberty St. at South End Ave
 F: Northern median strip of Vesey & West St
 G: Church and Duane St.
 H: South side of Chase Manhattan Plaza at Pine St.
 I: SE corner of Wall St. & Broadway
 J: NE corner of Warren & West St.
 K: West St. & Albany in median strip
 L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area

M: Western end of Harrison St. at West St.

(on tree next to bulkhead)

M1: West St. - 50 yards south of Harrison St. at bulkhead

N: South side of Pier 25 (next to volleyball ct)

P: NE corner of South End Ave. & Albany

Q: Barclay & West St. (center island) in proximity to USCG command post

R: TAGA Bus Location

S: Rector & South End

T: Pier 6 Helipoint

U: Pier 6 Exit 2

V: Pier 6 Bus Sign

W: Wash Tent Common Area

Key:

* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading.

** Structure (S) is roughly equivalent to fiber (f)

*** Chrysotile

**** Extremely low sample volume collected

NA⁽¹⁾ - Not analyzed due to overloading of particulates

NA⁽²⁾ - Not analyzed for TEM

n/a - Not applicable

NR - Not requested

NS - Sample not submitted at this time

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94

Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)

Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

1

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 12/22/01 1200 to 2359

PCM by NIOSH 7400										TEM (AHERA)		
Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	f/mm ²	f/cc	Structures (#)		S/mm ²	S-f/cc**		
							0.5µ - 5µ	5µ				
12/22/01	RST-02272	L	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048		
12/22/01	RST-02273	M1	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048		
12/22/01	RST-02274	N	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048		
12/22/01	RST-02275	J	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048		
12/22/01	RST-02276	Q	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048		
12/22/01	RST-02277	F	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048		
12/22/01	RST-02278	A	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048		
12/22/01	RST-02279	A-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048		
12/22/01	RST-02280	B	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048		
12/22/01	RST-02281	C	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048		
12/22/01	RST-02282	C-Duplicate	693	Air	<7.0	<0.004	0	0	<8.00	<0.0044		
12/22/01	RST-02283	H	467	Air	<7.0	<0.006	0	0	<8.00	<0.0066		
12/22/01	RST-02284	I	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048		
12/22/01	RST-02285	D	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048		
12/22/01	RST-02286	K	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048		
12/22/01	RST-02287	U	720	Air	7.01	0.004	0	0	<8.89	<0.0048		
12/22/01	RST-02288	V	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048		
12/22/01	RST-02289	S	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048		
12/22/01	RST-02290	P	248	Air	<7.0	<0.011	0	0	<8.00	<0.0124		
12/22/01	RST-02291	E	6****	Air	<7.0	<0.450	0	0	<8.00	<0.5133		
12/22/01	RST-02292	W	720	Air	15.92	0.009	0	0	<8.89	<0.0048		
12/23/01	FB122301	Field Blank	0	Air	<7.0	n/a	NA ⁽²⁾	NA ⁽²⁾	NA ⁽²⁾	NA ⁽²⁾		
12/23/01	TB122301	Trio Blank	0	Air	<7.0	n/a	NA ⁽²⁾	NA ⁽²⁾	NA ⁽²⁾	NA ⁽²⁾		

Sampling Locations:

A: NE corner of West Broadway & Barclay
B: SE corner of Church & Dey St.
C: Trinity (a.k.a. Church) & Liberty
C1: SW corner of Broadway & Liberty St.
D: East end of Albany St. at Greenwich St.
E: Western end of Liberty St. at South End Ave
F: Northern median strip of Vesey & West St
G: Church and Duane St.
H: South side of Chase Manhattan Plaza at Pine St.
I: SE corner of Wall St. & Broadway
J: NE corner of Warren & West St.
K: West St. & Albany in median strip
L: On walkway toward North Park rec area (north side of Suyvesant Hghn), access to TAGA bus area

M: Western end of Harrison St. at West St.
(on tree next to bulkhead)

M1: West St. - 50 yards south of Harrison St. at bulkhead

N: South side of Pier 25 (next to volleyball ct)

P: NE corner of South End Ave. & Albany

Q: Barclay & West St. (center island) in proximity to USCG command post

R: TAGA Bus Location

S: Rector & South End

T: Pier 6 Heliport

U: Pier 6 Exit 2

V: Pier 6 Bus Sign

W: Wash Tent Common Area

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94

Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)

Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

Key:

* Sample volume (liters) is below recommended limit for the TEM method;

** Structure (S) is roughly equivalent to fiber (f)

*** Chrysotile

****Extremely low sample volume collected

NA⁽¹⁾ - Not analyzed due to overloading of particulates

NA⁽²⁾ - Not analyzed for TEM

n/a - Not applicable

NR - Not requested

NS - Sample not submitted at this time

NYC Response

Asbestos Air Sampling Results for WTC Extended Network

Sampling Date and Time: 12/18/01 1200 to 2400

Data Validation Date: 12/22/2001

					PCM by NIOSH 7400		TEM (AHERA)			
Sampling Date	Sample No.	Sampling Location	Sample Volume (L)**	Matrix	f/mm ²	f/cc	Structures (#)		S/mm ²	S~f/cc*
							0.5µ - 5µ	5µ		
12/18/01	7093-18-0082	Park Row	1344	Air	8.92	0.003	0	0	<15.75	<0.0045
12/18/01	7093-19-0082	Chambers Street	1440	Air	<7.0	<0.002	0	0	<15.75	<0.0042
12/18/01	7093-20-0082	Coast Guard	1440	Air	<7.0	<0.002	0	0	<15.75	<0.0042
12/18/01	7093-15-0081	Manhattan PS #143	NS	Air	NS	NS	NS	NS	NS	NS
12/18/01	7094-09-0071	Bronx PS #154	1420	Air	<7.0	<0.002	0	0	<15.75	<0.0043
12/18/01	7096-12-0076	Queens PS #199	1440	Air	<7.0	<0.002	0	0	<15.75	<0.0042
12/18/01	7095-98-0078	Brooklyn PS #274	1440	Air	<7.0	<0.002	0	0	<15.75	<0.0042
12/18/01	7097-18-0074	Staten Island PS #44	1440	Air	<7.0	<0.002	0	0	<15.75	<0.0042

Key:

*Structure (S) roughly equivalent to fiber (f)

** Sample volume is based on pump reading

*** Sample volume is below recommended limit for TEM analysis

**** Chrysotile

NR - analysis not requested

NS - Sample not submitted for analysis

n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94

Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)

Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

ext-12-18-01pm

NYC Response

Asbestos Air Sampling Results for WTC Extended Network

Sampling Date and Time: 12/21/01 1200 to 2400

Data Validation Date: 12/26/2001

Sampling Date	Sample No.	Sampling Location	Sample Volume (L)	Matrix	PCM by NIOSH 7400		TEM (AHERA)			
					f/mm ²	f/cc	Structures (#)		S/mm ²	S-f/cc*
12/21/01	7093-18-0085	Park Row	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
12/21/01	7093-19-0085	Chambers Street	1340	Air	<7.0	<0.002	0	0	<16.00	<0.0046
12/21/01	7093-20-0085	Coast Guard	1332	Air	<7.0	<0.002	0	0	<16.00	<0.0046
12/21/01	-	Manhattan PS #143	NS	Air	NS	NS	NS	NS	NS	NS
12/21/01	7094-09-0074	Bronx PS #154	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043
12/21/01	7096-12-0079	Queens PS #199	1270	Air	<7.0	<0.002	0	0	<16.00	<0.0049
12/21/01	-	Brooklyn PS #274	NS	Air	NS	NS	NS	NS	NS	NS
12/21/01	7097-18-0077	Staten Island PS #44	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043

Key:

*Structure (S) roughly equivalent to fiber (f)

** Sample volume is based on pump reading

*** Sample volume is below recommended limit for TEM analysis

**** Chrysotile

NR - analysis not requested

NS - Sample not submitted for analysis

n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
 Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
 Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

ext-12-21-01pm

**NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 12/21/01 0750 to 2204**

Data Validation Date: 12/27/2001

Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	PCM by NIOSH 7400		TEM (AHERA)			
					f/mm ²	f/cc	Structures (#) 0.5µ - 5µ	S/mm ²	S-f/cc**	S-f/cc**
12/21/01	LF01712	P-1	720	Air	<7.0	<0.004	0	<8.75	<0.0047	<0.0047
12/21/01	LF01713	P-2	666	Air	<7.0	<0.004	0	<8.75	<0.0046	<0.0046
12/21/01	LF01714	P-3	720	Air	<7.0	<0.004	0	<8.75	<0.0047	<0.0047
12/21/01	LF01715	P-4	720	Air	<7.0	<0.004	0	<8.75	<0.0047	<0.0047
12/21/01	LF01716	P-5	720	Air	<7.0	<0.004	0	<8.75	<0.0047	<0.0047
12/21/01	LF01717	P-6	NS	Air	NS	NS	NS	NS	NS	NS
12/21/01	LF01718	P-7	695	Air	<7.0	<0.004	0	<8.75	<0.0048	<0.0048
12/21/01	LF01719	P-8	720	Air	<7.0	<0.004	0	<8.75	<0.0047	<0.0047
12/21/01	LF01720	W-11	720	Air	8.92	0.005	0	<8.75	<0.0047	<0.0047
12/21/01	LF01721	W-12A	720	Air	10.19	0.005	0	<8.75	<0.0047	<0.0047
12/21/01	LF01722	W-12B	720	Air	<7.0	<0.004	0	<8.75	<0.0047	<0.0047
12/21/01	LF01723	B-13	716	Air	<7.0	<0.004	0	<8.75	<0.0047	<0.0047
12/21/01	LF01724	B-14	720	Air	<7.0	<0.004	0	<8.75	<0.0047	<0.0047
12/21/01	LF01725	T-15	720	Air	<7.0	<0.004	0	<8.75	<0.0047	<0.0047
12/21/01	LF01726	T-16	720	Air	<7.0	<0.004	0	<8.75	<0.0047	<0.0047
12/21/01	LF01727	O-17	NS	Air	NS	NS	NS	NS	NS	NS
12/21/01	LF01728	O-18	700	Air	<7.0	<0.004	0	<8.75	<0.0047	<0.0047
12/21/01	LF01729	O-19	720	Air	<7.0	<0.004	0	<8.75	<0.0047	<0.0047
12/21/01	LF01730	MPHS-20	720	Air	<7.0	<0.004	0	<8.75	<0.0047	<0.0047
12/21/01	LF01731	Lot Blank	0	Air	<7.0	n/a	0	NA ⁽²⁾	NA ⁽²⁾	NA ⁽²⁾
12/21/01	LF01732	Trip Blank	0	Air	<7.0	n/a	0	NA ⁽²⁾	NA ⁽²⁾	NA ⁽²⁾

Key:

* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading

** Structure (S) is roughly equivalent to fiber (f)

*** Chrysotile

NA ⁽¹⁾ - Not analyzed due to overloading of particulates

NA ⁽²⁾ - Not analyzed for TEM

n/a - Not applicable

NC - Sample not collected

NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

NYC Response

Asbestos Air Sampling Results for Staten Island Landfill

Sampling Date and Times: 12/24/01 0905 to 12/25/01 0005^(a)

Data Validation Date: 12/28/2001

Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	PCM by NIOSH 7400		TEM (AHERA)			
					f/mm ²	f/cc	Structures (#)	0.5µ - 5µ	S/mm ²	S-f/cc**
12/24/01	LF01773	P-1	900	Air	<7.0	<0.003	0	0	<11.25	<0.0048
12/24/01	LF01774	P-2	564	Air	<7.0	<0.005	0	0	<7.87	<0.0054
12/24/01	LF01775	P-3	804	Air	<7.0	<0.003	0	0	<9.84	<0.0047
12/24/01	LF01776	P-4	775	Air	<7.0	<0.003	0	0	<9.84	<0.0049
12/24/01	LF01777	P-5	788	Air	<7.0	<0.003	0	0	<9.84	<0.0048
12/24/01	LF01778	P-6	NS ⁽¹⁾	NS ⁽¹⁾	NS ⁽¹⁾	NS ⁽¹⁾	NS ⁽¹⁾	NS ⁽¹⁾	NS ⁽¹⁾	NS ⁽¹⁾
12/24/01	LF01779	P-7	748	Air	<7.0	<0.004	0	0	<8.75	<0.0045
12/24/01	LF01780	P-8	834	Air	<7.0	<0.003	0	0	<9.84	<0.0045
12/24/01	LF01781	W-11	830	Air	<7.0	<0.003	0	0	<9.84	<0.0046
12/24/01	LF01782	W-12A	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/24/01	LF01783	W-12B	809	Air	<7.0	<0.003	0	0	<9.84	<0.0047
12/24/01	LF01784	B-13	NS ⁽¹⁾	NS ⁽¹⁾	NS ⁽¹⁾	NS ⁽¹⁾	NS ⁽¹⁾	NS ⁽¹⁾	NS ⁽¹⁾	NS ⁽¹⁾
12/24/01	LF01785	B-14	507	Air	<7.0	<0.005	0	0	<7.87	<0.0060
12/24/01	LF01786 ^(a)	T-15	2638	Air	<7.0	<0.001	0	0	<19.69	<0.0029
12/24/01	LF01787 ^(a)	T-16	2647	Air	<7.0	<0.001	0	0	<19.69	<0.0029
12/24/01	LF01788	O-17	NS ⁽²⁾	NS ⁽²⁾	NS ⁽²⁾	NS ⁽²⁾	NS ⁽²⁾	NS ⁽²⁾	NS ⁽²⁾	NS ⁽²⁾
12/24/01	LF01789	O-18	800	Air	<7.0	<0.003	0	0	<9.84	<0.0047
12/24/01	LF01790	MPHS-20	839	Air	<7.0	<0.003	0	0	<9.84	<0.0045
12/24/01	LF01791	Lot Blank	0	Air	<7.0	n/a	NA ⁽²⁾	NA ⁽²⁾	NA ⁽²⁾	NA ⁽²⁾
12/24/01	LF01792	Trip Blank	0	Air	<7.0	n/a	NA ⁽²⁾	NA ⁽²⁾	NA ⁽²⁾	NA ⁽²⁾

Key:

* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading

** Structure (S) is roughly equivalent to fiber (f)

*** Chrysotile

**** Extremely low sample volume collected

NA⁽¹⁾ - Not analyzed due to overloading of particulatesNA⁽²⁾ - Not analyzed for TEM

n/a - Not applicable

NC - Sample not collected

NS⁽¹⁾ - Sample not submitted due to no sample volumeNS⁽²⁾ - Sample not submitted at this time due to no access to station location^(a) - Sample LF01786 (T-15) was collected 12/24/01 0940 to 12/26/01 0538

Sample LF01787 (T-16) was collected 12/24/01 0943 to 12/26/01 0550

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94

Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)

Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

FK-12-24-01-am

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 12/23/01 1200 to 2359

Data Validation Date: 12/27/01

Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	PCM by NIOSH 7400		TEM (AHERA)			
					f/mm ²	f/cc	Structures (#)		S/mm ²	S-f/cc**
12/23/01	RST-02314	L	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/23/01	RST-02315	L-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/23/01	RST-02316	N	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/23/01	RST-02317	N-Duplicate	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/23/01	RST-02318	M1	451	Air	<7.0	<0.006	0	0	<8.00	<0.0068
12/23/01	RST-02319	J	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/23/01	RST-02320	Q	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/23/01	RST-02321	F	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/23/01	RST-02322	A	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/23/01	RST-02323	B	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/23/01	-	C	NS	NS	NS	NS	NS	NS	NS	NS
12/23/01	RST-02324	H	698	Air	<7.0	<0.004	0	0	<8.89	<0.0049
12/23/01	RST-02325	I	599	Air	<7.0	<0.0045	0	0	<8.00	<0.0051
12/23/01	RST-02326	D	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/23/01	RST-02327	K	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/23/01	RST-02328	U	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/23/01	RST-02329	V	514	Air	<7.0	<0.005	0	0	<8.00	<0.0060
12/23/01	RST-02330	S	366	Air	<7.0	<0.007	0	0	<8.00	<0.0084
12/23/01	RST-02331	P	390	Air	<7.0	<0.007	0	0	<8.00	<0.0079
12/23/01	RST-02332	E	720	Air	<7.0	<0.004	0	0	<8.89	<0.0048
12/23/01	RST-02333	W	720	Air	<7.0	<0.004	0	1***	8.89	0.0048
12/24/01	FB122401	Field Blank	0	Air	<7.0	n/a	NA ⁽²⁾	NA ⁽²⁾	NA ⁽²⁾	NA ⁽²⁾
12/24/01	TB122401	Trip Blank	0	Air	<7.0	n/a	NA ⁽²⁾	NA ⁽²⁾	NA ⁽²⁾	NA ⁽²⁾

Sampling Locations:

A: NE corner of West Broadway & Barclay
 B: SE corner of Church & Dey St.
 C: Trinity (a.k.a. Church) & Liberty
 C1: SW corner of Broadway & Liberty St.
 D: East end of Albany St. at Greenwich St.
 E: Western end of Liberty St. at South End Ave
 F: Northern median strip of Vesey & West St
 G: Church and Duane St.
 H: South side of Chase Manhattan Plaza at Pine St.
 I: SE corner of Wall St. & Broadway
 J: NE corner of Warren & West St.
 K: West St. & Albany in median strip
 L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area

M: Western end of Harrison St. at West St.

(on tree next to bulkhead)

M1: West St. - 50 yards south of Harrison St. at bulkhead

N: South side of Pier 25 (next to volleyball ct)

P: NE corner of South End Ave. & Albany

Q: Barclay & West St. (center island) in

proximity to USCG command post

R: TAGA Bus Location

S: Rector & South End

T: Pier 6 Heliport

U: Pier 6 Exit 2

V: Pier 6 Bus Sign

W: Wash Tent Common Area

Key:

* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading

** Structure (S) is roughly equivalent to fiber (f)

*** Chrysofile

**** Extremely low sample volume collected

NA⁽¹⁾ - Not analyzed due to overloading of particulates

NA⁽²⁾ - Not analyzed for TEM

n/a - Not applicable

NR - Not requested

NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

**NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 12/27/01 0757 to 2235**

Data Validation Date: 12/30/2001

Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	PCM by NIOSH 7400		TEM (AHERA)			
					f/mm ²	f/cc	Structures (#) 0.5µ - 5µ	5µ	S/mm ²	S-f/cc**
12/27/01	LF01814	P-1	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/27/01	LF01815	P-2	548	Air	<7.0	<0.005	1***	0	8.75	0.0061
12/27/01	LF01816	P-3	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/27/01	LF01817	P-4	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/27/01	LF01818	P-5	720	Air	<7.0	<0.004	1***	0	8.75	0.0047
12/27/01	LF01819	P-6	611	Air	<7.0	<0.004	0	0	<8.75	<0.0055
12/27/01	LF01820	P-7	704	Air	<7.0	<0.004	0	0	<8.75	<0.0048
12/27/01	LF01821	P-8	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/27/01	LF01822	W-11	720	Air	NA ⁽¹⁾	NA ⁽¹⁾	NA ⁽¹⁾	NA ⁽¹⁾	NA ⁽¹⁾	NA ⁽¹⁾
12/27/01	LF01823	W-12A	720	Air	NA ⁽¹⁾	NA ⁽¹⁾	0	0	<8.75	<0.0047
12/27/01	LF01824	W-12B	720	Air	<7.0	<0.004	5***	0	43.74	0.0234
12/27/01	LF01825	B-13	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/27/01	LF01826	B-14	675	Air	<7.0	<0.004	0	0	<8.75	<0.0050
12/27/01	LF01827	T-15	720	Air	7.64	0.004	0	0	<8.75	<0.0047
12/27/01	LF01828	T-16	720	Air	<7.0	<0.004	2***	0	17.50	0.0094
12/27/01	LF01829	O-17	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/27/01	LF01830	O-18	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/27/01	LF01831	O-19	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/27/01	LF01832	MPHS-20	720	Air	<7.0	<0.004	NA ⁽¹⁾	NA ⁽¹⁾	NA ⁽¹⁾	NA ⁽¹⁾
12/27/01	LF01833	Lot Blank	0	Air	<7.0	n/a	NA ⁽²⁾	NA ⁽²⁾	NA ⁽²⁾	NA ⁽²⁾
12/27/01	LF01834	Trip Blank	0	Air	<7.0	n/a	NA ⁽²⁾	NA ⁽²⁾	NA ⁽²⁾	NA ⁽²⁾

Key:

- * Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading
- ** Structure (S) is roughly equivalent to fiber (f)
- *** Chrysotile
- **** Extremely low sample volume collected

NA⁽¹⁾ - Not analyzed due to overloading of particulates
 NA⁽²⁾ - Not analyzed for TEM
 n/a - Not applicable
 NC - Sample not collected
 NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
 Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
 Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

Daily DataRam Particulate Monitoring Summary Sheet
Staten Island Landfill
December 20, 2001

Location	Longitude	Latitude	DataRam ID	Tag #	Logged Points	Elapsed Time	Avg. Time (sec)	Logging Periods	Calibration Factor	STEL ug/m3	Min. Conc. ug/m3	Avg. Conc. ug/m3	Max. Conc. ug/m3
1	-74.199795	40.565139	2226	1	64	16:00:00	10	00:15:00	100	0.0	0.0	30.2	808.6
2	-74.198262	40.566883	2295	1	0	00:00:00	10	00:15:00	100	0.0	0	0	0
3	-74.198685	40.570054	2011	1	0	00:00:00	10	00:15:00	100	0.0	0	0	0
4	-74.201380	40.569790	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
5	-74.205873	40.568892	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
6	-74.207406	40.563818	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
7	-74.205414	40.560434	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
8	-74.203019	40.561915	2083	1	17	4:15:00	10	00:15:00	0	0.0	0.0	12.3	86.6

Daily DataRam Particulate Monitoring Summary Sheet
Staten Island Landfill
December 29, 2001

Location	Longitude	Latitude	DataRam ID	Tag #	Logged Points	Elapsed Time	Avg. Time (sec)	Logging Periods	Calibration Factor	STEL ug/m3	Min. Conc. ug/m3	Avg. Conc. ug/m3	Max. Conc. ug/m3
1	-74.199795	40.565139	2226	1	45	11:15:00	10	00:15:00	100	0.0	15.9	37.9	280.4
2	-74.198262	40.566883	2295	1	45	11:15:00	10	00:15:00	100	0.0	5.1	26.2	990.6
3	-74.198685	40.570054	2011	1	45	11:15:00	10	00:15:00	100	0.0	5.0	24.5	234.0
4	-74.201380	40.569790	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
5	-74.205873	40.568892	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
6	-74.207406	40.563818	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
7	-74.205414	40.560434	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
8	-74.203019	40.561915	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0

**NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 12/28/01**

File Name	NYC598	NYC599	NYC600	NYC601	NYC602	NYC603
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent	Austin Tobin Plaza	North Tower	South Tower
Sample Number			A07276	A07277	A07278	A07279
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	100 mL	100 mL
Reporting Limit (RL)	20	20	20	20	50	50
Sample Conc. Units	ppb _v	ppb _v	ppb _v	ppb _v	ppb _v	ppb _v
Propylene	RL	RL	RL	RL	260	RL
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	320	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	33	RL	RL	RL
Acetone	RL	RL	76	RL	120	62
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	200
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	RL	RL	RL
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	RL	RL	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	260	RL
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	93	22	RL	RL
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	RL
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	95	100
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	140	RL
m&p-Xylenes	RL	RL	RL	RL	RL	RL
o-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	RL	RL
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

**United States Environmental Protection Agency
Removal Support Team
DataRAM Monitoring Work Sheet**

Roy F. Weston, Inc.
EPA Contract No. 68-W-00-113

Site: World Trade Center

Sampler: D. Adams

U.S. EPA: Norrell

Date: 12/30/01

RST Site Project Manager Brennan

Location	R	L	N			
DataRAM ID No.	2643	2647	2646			
Flow Rate (Liters / Minute)	2.0	2.0	2.0			
Start Time	0814	0815	0835			
Stop Time	1444	1450	1453			
Run Time (Minutes)	390	395	378			
Minimum Concentration (ug/m3)	1.2	0.1	0.1			
Maximum Concentration (ug/m3)	53.2	139.4	82.8			
Average Concentration (TWA) (ug/m3)	19.1	14.5	13.7			

**United States Environmental Protection Agency
Removal Support Team
DataRAM Monitoring Work Sheet**

Roy F. Weston, Inc.
EPA Contract No. 68-W-00-113

Site: World Trade Center

Sampler: Sylvia

U.S. EPA: Norrell

Date: 12/28/01

RST Site Project Manager Brennan

Location	R	L	N			
DataRAM ID No.	2643	2646	2647			
Flow Rate (Liters / Minute)	2.0	2.0	2.0			
Start Time	0752	0755	0818			
Stop Time	1410	1413	1427			
Run Time (Minutes)	377	377	366			
Minimum Concentration (ug/m3)	1.9	15.1	8.4			
Maximum Concentration (ug/m3)	88.9	554.3	100			
Average Concentration (TWA) (ug/m3)	23.9	41.6	20.3			

**NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 12/20/01 0001 to 1200**

Data Validation Date: 12/22/01

Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	PCM by NIOSH 7400		TEM (AHERA)		
					f/mm ²	f/cc	Structures (#)	S/mm ²	S-f/cc**
12/20/01	RST-02165	L	708	Air	8.92	0.005	0.5µ - 5µ	0	<8.75
12/20/01	RST-02166	M-1	720	Air	8.92	0.005	5µ	0	<8.75
12/20/01	RST-02167	M1-Dup	720	Air	7.64	0.004	0	0	<8.75
12/20/01	RST-02168	N	1224*	Air	7.01	0.002	0	0	<15.75
12/20/01	RST-02169	J	714	Air	<7.0	<0.004	0	0	<8.75
12/20/01	RST-02170	J-Dup	720	Air	12.10	0.0065	0	0	<8.75
12/20/01	RST-02171	Q	870.4	Air	8.92	0.004	0	0	<11.25
12/20/01	RST-02172	F	720	Air	<7.0	<0.004	0	0	<8.75
12/20/01	RST-02173	A	720	Air	10.19	0.005	0	0	<8.75
12/20/01	RST-02174	B	720	Air	8.92	0.005	0	0	<8.75
12/20/01	RST-02175	C	720	Air	11.46	0.006	0	0	<8.75
12/20/01	RST-02176	H	720	Air	10.19	0.005	0	0	<8.75
12/20/01	RST-02177	I	720	Air	10.19	0.005	0	0	<8.75
12/20/01	RST-02178	D	720	Air	<7.0	<0.004	0	0	<8.75
12/20/01	RST-02179	K	720	Air	<7.0	<0.004	0	0	<8.75
12/20/01	RST-02180	T	720	Air	<7.0	<0.004	0	0	<8.75
12/20/01	RST-02181	U	720	Air	<7.0	<0.004	0	0	<8.75
12/20/01	RST-02182	V	720	Air	<7.0	<0.004	0	0	<8.75
12/20/01	RST-02183	S	720	Air	7.01	0.004	0	0	<8.75
12/20/01	RST-02184	P	244	Air	<7.0	<0.011	0	0	<8.75
12/20/01	RST-02185	E	720	Air	<7.0	<0.004	0	0	<8.75
12/20/01	RST-02186	W	323	Air	<7.0	<0.008	0	0	<8.75
12/20/01	FB122001	Field Blank	0	Air	<7.0	n/a	NA ⁽²⁾	NA ⁽²⁾	NA ⁽²⁾
12/20/01	TB122001	Trip Blank	0	Air	<7.0	n/a	NA ⁽²⁾	NA ⁽²⁾	NA ⁽²⁾

Sampling Locations:

A: NE corner of West Broadway & Barclay
 B: SE corner of Church & Dey St.
 C: Trinity (a.k.a. Church) & Liberty
 C1: SW corner of Broadway & Liberty St.
 D: East end of Albany St. at Greenwich St.
 E: Western end of Liberty St. at South End Ave
 F: Northern median strip of Vesey & West St
 G: Church and Duane St.
 H: South side of Chase Manhattan Plaza at Pine St.
 I: SE corner of Wall St. & Broadway
 J: NE corner of Warren & West St.
 K: West St. & Albany in median strip
 L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area

M: Western end of Harrison St. at West St.
 (on tree next to bulkhead)
 M1: West St. - 50 yards south of Harrison St. at bulkhead
 N: South side of Pier 25 (next to volleyball ct)
 P: NE corner of South End Ave. & Albany
 Q: Barclay & West St. (center island) in proximity to USCG command post
 R: TAGA Bus Location
 S: Rector & South End
 T: Pier 6 Hellport
 U: Pier 6 Exit 2
 V: Pier 6 Bus Sign
 W: Wash Tent Common Area

Key:

* Sample volume (liters) is below recommended limit for the TEM method except for sample RST-02168; volume is based on pump reading

** Structure (S) is roughly equivalent to fiber (f)

*** Chrysotile

NA⁽¹⁾ - Not analyzed due to overloading of particulates

NA⁽²⁾ - Not analyzed for TEM

n/a - Not applicable

NR - Not requested

NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 12/21/01 1200 to 2359

Data Validation Date: 12/26/01

Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	PCM by NIOSH 7400		TEM (AHERA)		
					f/mm ²	f/cc	Structures (#)	S/mm ²	S-f/cc**
12/21/01	RST-02230	L	720	Air	<7.0	<0.004	0.5µ - 5µ	<8.89	<0.0048
12/21/01	RST-02231	M1	720	Air	8.92	0.005	0	<8.89	<0.0048
12/21/01	RST-02232	N	720	Air	8.28	0.004	0	<8.89	<0.0048
12/21/01	RST-02233	J	720	Air	<7.0	<0.004	0	<8.89	<0.0048
12/21/01	RST-02234	Q	720	Air	7.64	0.004	0	<8.89	<0.0048
12/21/01	RST-02235	F	720	Air	<7.0	<0.004	0	<8.89	<0.0048
12/21/01	RST-02236	A	720	Air	<7.0	<0.004	0	<8.89	<0.0048
12/21/01	RST-02237	B	720	Air	10.19	0.005	0	<8.89	<0.0048
12/21/01	RST-02238	C	720	Air	8.92	0.005	0	<8.89	<0.0048
12/21/01	RST-02239	H	720	Air	7.01	0.004	0	<8.89	<0.0048
12/21/01	RST-02240	H-Duplicate	720	Air	<7.0	<0.004	0	<8.89	<0.0048
12/21/01	RST-02241	I	700	Air	<7.0	<0.004	0	<8.89	<0.0049
12/21/01	RST-02242	D	720	Air	7.64	0.004	0	<8.89	<0.0048
12/21/01	RST-02243	K	720	Air	<7.0	<0.004	0	<8.89	<0.0048
12/21/01	-	T	NS	Air	NS	NS	NS	NS	NS
12/21/01	RST-02244	U	695	Air	<7.0	<0.004	0	<8.89	<0.0049
12/21/01	RST-02245	V	700	Air	<7.0	<0.004	0	<8.89	<0.0049
12/21/01	RST-02246	S	720	Air	<7.0	<0.004	0	<8.89	<0.0048
12/21/01	RST-02247	P	720	Air	<7.0	<0.004	0	<8.89	<0.0048
12/21/01	RST-02248	P-Duplicate	720	Air	<7.0	<0.004	0	<8.89	<0.0048
12/21/01	RST-02249	E	720	Air	<7.0	<0.004	0	<8.89	<0.0048
12/21/01	RST-02250	W	720	Air	17.83	0.0095	0	<8.89	<0.0048
12/22/01	FB122201	Field Blank	0	Air	<7.0	n/a	NA ⁽²⁾	NA ⁽²⁾	NA ⁽²⁾
12/22/01	TB122201	Trip Blank	0	Air	<7.0	n/a	NA ⁽²⁾	NA ⁽²⁾	NA ⁽²⁾

Sampling Locations:

A: NE corner of West Broadway & Barclay
 B: SE corner of Church & Dey St.
 C: Trinity (a.k.a. Church) & Liberty
 C1: SW corner of Broadway & Liberty St.
 D: East end of Albany St. at Greenwich St.
 E: Western end of Liberty St. at South End Ave
 F: Northern median strip of Vesey & West St
 G: Church and Duane St.
 H: South side of Chase Manhattan Plaza at Pine St.
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 K: West St. & Albany in median strip
 L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area

M: Western end of Harrison St. at West St.
 (on tree next to bulkhead)

M1: West St. - 50 yards south of Harrison St. at bulkhead

N: South side of Pier 25 (next to volleyball ct)

P: NE corner of South End Ave. & Albany

Q: Barclay & West St. (center island) in

proximity to USCG command post

R: TAGA Bus Location

S: Rector & South End

T: Pier 6 Heliport

U: Pier 6 Exit 2

V: Pier 6 Bus Sign

W: Wash Tent Common Area

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94

Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)

Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

Key:

* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading

** Structure (S) is roughly equivalent to fiber (f)

*** Chrysotile

NA⁽¹⁾ - Not analyzed due to overloading of particulates

NA⁽²⁾ - Not analyzed for TEM

n/a - Not applicable

NR - Not requested

NS - Sample not submitted at this time

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 12/23/01 0001 to 1200

Data Validation Date: 12/26/01

Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	PCM by NIOSH 7400		TEM (AHERA)		
					f/mm ²	f/cc	Structures (#)	S/mm ²	S-f/cc**
12/23/01	RST-02293	L	720	Air	<7.0	<0.004	0.5µ - 5µ	<8.89	<0.0048
12/23/01	RST-02294	M-1	720	Air	<7.0	<0.004	0	<8.89	<0.0048
12/23/01	RST-02295	N	649	Air	<7.0	<0.004	0	<8.00	<0.0047
12/23/01	RST-02296	J	720	Air	<7.0	<0.004	0	<8.89	<0.0048
12/23/01	RST-02297	Q	479	Air	<7.0	<0.006	0	<8.00	<0.0064
12/23/01	RST-02298	F	720	Air	<7.0	<0.004	0	<8.89	<0.0048
12/23/01	RST-02299	A	383	Air	<7.0	<0.007	0	<8.00	<0.0080
12/23/01	RST-02300	B	720	Air	<7.0	<0.004	0	<8.89	<0.0048
12/23/01	RST-02301	B-Duplicate	720	Air	<7.0	<0.004	0	<8.89	<0.0048
12/23/01	RST-02302	C	720	Air	7.64	0.004	0	<8.89	<0.0048
12/23/01	RST-02303	H	704	Air	<7.0	<0.004	0	<8.89	<0.0049
12/23/01	RST-02304	I	512	Air	<7.0	<0.005	0	<8.00	<0.0060
12/23/01	RST-02305	D	720	Air	<7.0	<0.004	0	<8.89	<0.0048
12/23/01	RST-02306	D-Duplicate	720	Air	7.01	0.004	0	<8.89	<0.0048
12/23/01	RST-02307	K	720	Air	<7.0	<0.004	0	<8.89	<0.0048
12/23/01	RST-02308	U	720	Air	<7.0	<0.004	0	<8.89	<0.0048
12/23/01	RST-02309	V	718	Air	<7.0	<0.004	0	<8.89	<0.0048
12/23/01	RST-02310	S	713	Air	<7.0	<0.004	0	<8.89	<0.0048
12/23/01	RST-02311	P	718	Air	<7.0	<0.004	0	<8.89	<0.0048
12/23/01	RST-02312	E	720	Air	<7.0	<0.004	0	<8.89	<0.0048
12/23/01	RST-02313	W	720	Air	<7.0	<0.004	0	<8.89	<0.0048
12/23/01	FB122301	Field Blank	0	Air	<7.0	n/a	NA ⁽²⁾	NA ⁽²⁾	NA ⁽²⁾
12/23/01	TB122301	Trip Blank	0	Air	<7.0	n/a	NA ⁽²⁾	NA ⁽²⁾	NA ⁽²⁾

Sampling Locations:

A: NE corner of West Broadway & Barclay
 B: SE corner of Church & Dey St.
 C: Trinity (a.k.a. Church) & Liberty
 C1: SW corner of Broadway & Liberty St.
 D: East end of Albany St. at Greenwich St.
 E: Western end of Liberty St. at South End Ave
 F: Northern median strip of Vesey & West St
 G: Church and Duane St.
 H: South side of Chase Manhattan Plaza at Pine St.
 I: SE corner of Wall St. & Broadway
 J: NE corner of Warren & West St.
 K: West St. & Albany in median strip
 L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area

M: Western end of Harrison St. at West St.
 (on tree next to bulkhead)

M1: West St. - 50 yards south of Harrison St. at bulkhead

N: South side of Pier 25 (next to volleyball ct)

P: NE corner of South End Ave. & Albany

Q: Barclay & West St. (center island) in proximity to USCG command post

R: TAGA Bus Location

S: Rector & South End

T: Pier 6 Heliport

U: Pier 6 Exit 2

V: Pier 6 Bus Sign

W: Wash Tent Common Area

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94

Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)

Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

Key:

* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading.

** Structure (S) is roughly equivalent to fiber (f)

*** Chrysotile

NA⁽¹⁾ - Not analyzed due to overloading of particulates

NA⁽²⁾ - Not analyzed for TEM

n/a - Not applicable

NR - Not requested

NS - Sample not submitted at this time

NYC Response

Asbestos Air Sampling Results for WTC Extended Network
Sampling Date and Time: 12/19/01 1200 to 2400

Data Validation Date: 12/27/2001

Sampling Date	Sample No.	Sampling Location	Sample Volume (L) **	Matrix	PCM by NIOSH 7400			TEM (AHERA)			
					f/mm ²	f/cc	Structures (#)				
							0.5µ - 5µ	5µ	S/mm ²	S-f/cc*	
12/19/01	(a) 7093-18-	Park Row	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043	
12/19/01	(a) 7093-19-	Chambers Street	1032***	Air	<7.0	<0.003	0	0	<11.43	<0.0043	
12/19/01	(a) 7093-20-	Coast Guard	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043	
12/19/01	7093-15-0082	Manhattan PS #143	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043	
12/19/01	7094-09-0072	Bronx PS #154	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043	
12/19/01	7096-12-0077	Queens PS #199	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043	
12/19/01	7095-98-0079	Brooklyn PS #274	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043	
12/19/01	7097-18-0075	Staten Island PS #44	1440	Air	<7.0	<0.002	0	0	<16.00	<0.0043	

Key:

*Structure (S) roughly equivalent to fiber (f)

** Sample volume is based on pump reading

*** Sample volume is below recommended limit for TEM analysis

**** Chrysotile

NR - analysis not requested

NS - Sample not submitted for analysis

n/a - Not applicable

(a) Sample number was incomplete.

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94

Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)

Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

NYC Response
Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 12/25/01 1200 to 2359

Data Validation Date: 12/30/01

Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	PCM by NIOSH 7400			TEM (AHERA)			
					f/mm ²	f/cc		Structures (#)		S/mm ²	S-f/cc**
12/25/01	RST-02398	L	720	Air	<7.0	<0.004		0.5µ - 5µ	5µ	<8.89	<0.0048
12/25/01	RST-02399	M1	720	Air	<7.0	<0.004		0	0	<8.89	<0.0048
12/25/01	RST-02400	N	185****	Air	<7.0	<0.015		0	0	<8.00	<0.0166
12/25/01	RST-02401	N-Duplicate	720	Air	<7.0	<0.004		1***	0	8.89	0.0048
12/25/01	RST-02402	J	720	Air	<7.0	<0.004		0	0	<8.89	<0.0048
12/25/01	RST-02403	Q	720	Air	<7.0	<0.004		0	0	<8.89	<0.0048
12/25/01	RST-02404	F	720	Air	<7.0	<0.004		0	0	<8.89	<0.0048
12/25/01	RST-02405	A	720	Air	<7.0	<0.004		0	0	<8.89	<0.0048
12/25/01	RST-02406	C	720	Air	<7.0	<0.004		0	0	<8.89	<0.0048
12/25/01	RST-02407	B	720	Air	<7.0	<0.004		0	0	<8.89	<0.0048
12/25/01	RST-02408	H	720	Air	<7.0	<0.004		0	0	<8.89	<0.0048
12/25/01	-	I	NS	NS	NS	NS		NS	NS	NS	NS
12/25/01	RST-02409	D	720	Air	<7.0	<0.004		0	0	<8.89	<0.0048
12/25/01	RST-02410	K	720	Air	<7.0	<0.004		2***	0	17.78	0.0095
12/25/01	RST-02411	U	239	Air	<7.0	<0.011		0	0	<8.89	<0.0143
12/25/01	RST-02412	V	720	Air	<7.0	<0.004		0	0	<8.89	<0.0048
12/25/01	RST-02413	S	620	Air	<7.0	<0.004		0	0	<8.89	<0.0055
12/25/01	RST-02414	P	720	Air	<7.0	<0.004		0	0	<8.89	<0.0048
12/25/01	RST-02415	E	720	Air	<7.0	<0.004		0	0	<8.89	<0.0048
12/25/01	RST-02416	W	720	Air	<7.0	<0.004		1***	0	8.89	0.0048
12/26/01	FB122601	Field Blank	0	Air	<7.0	n/a		NA ⁽²⁾	NA ⁽²⁾	NA ⁽²⁾	NA ⁽²⁾
12/26/01	TB122601	Trip Blank	0	Air	<7.0	n/a		NA ⁽²⁾	NA ⁽²⁾	NA ⁽²⁾	NA ⁽²⁾

Sampling Locations:

A: NE corner of West Broadway & Barclay
 B: SE corner of Church & Dey St.
 C: Trinity (a.k.a. Church) & Liberty
 C1: SW corner of Broadway & Liberty St.
 D: East end of Albany St. at Greenwich St.
 E: Western end of Liberty St. at South End Ave
 F: Northern median strip of Vesey & West St
 G: Church and Duane St.
 H: South side of Chase Manhattan Plaza at Pine St.
 I: SE corner of Wall St. & Broadway
 J: NE corner of Warren & West St.
 K: West St. & Albany in median strip
 L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area

M: Western end of Harrison St. at West St.
 (on tree next to bulkhead)

M1: West St. - 50 yards south of Harrison St. at bulkhead

N: South side of Pier 25 (next to volleyball ct)

P: NE corner of South End Ave. & Albany

Q: Barclay & West St. (center island) in proximity to USCG command post

R: TAGA Bus Location

S: Rector & South End

T: Pier 6 Helipoint

U: Pier 6 Exit 2

V: Pier 6 Bus Sign

W: Wash Tent Common Area

Key:

* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading

** Structure (S) is roughly equivalent to fiber (f)

*** Chrysotile

**** Extremely low sample volume collected

NA⁽¹⁾ - Not analyzed due to overloading of particulates

NA⁽²⁾ - Not analyzed for TEM

n/a - Not applicable

NR - Not requested

NS - Sample not submitted

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94
Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

NYC Response

Asbestos Air Sampling Results for Staten Island Landfill

Sampling Date and Times: 12/22/01 0820 to 2200^(a)

Data Validation Date: 12/30/2001

Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	PCM by NIOSH 7400		TEM (AHERA)			
					f/mm ²	f/cc	Structures (#)	S/mm ²	S-f/cc**	S-f/cc**
12/22/01	LF01733	P-1	720	Air	<7.0	<0.004	0	<8.75	<0.0047	<0.0047
12/22/01	LF01734	P-2	720	Air	<7.0	<0.004	0	<8.75	<0.0047	<0.0047
12/22/01	LF01735	P-3	720	Air	<7.0	<0.004	0	<8.75	<0.0047	<0.0047
12/22/01	LF01736	P-4	720	Air	<7.0	<0.004	0	<8.75	<0.0047	<0.0047
12/22/01	LF01737	P-5	720	Air	<7.0	<0.004	0	<8.75	<0.0047	<0.0047
12/22/01	LF01738	P-6	615	Air	<7.0	<0.004	0	<8.75	<0.0055	<0.0055
12/22/01	LF01739	P-7	720	Air	<7.0	<0.004	0	<8.75	<0.0047	<0.0047
12/22/01	LF01740	P-8	720	Air	<7.0	<0.004	2***	26.25	0.0140	0.0140
12/22/01	LF01741	W-11	720	Air	<7.0	<0.004	0	<8.75	<0.0047	<0.0047
12/22/01	LF01742	W-12A	720	Air	19.11	0.010	0	<8.75	<0.0047	<0.0047
12/22/01	LF01743	W-12B	720	Air	<7.0	<0.004	0	<8.75	<0.0047	<0.0047
12/22/01	LF01744	B-13	720	Air	<7.0	<0.004	0	<8.75	<0.0047	<0.0047
12/22/01	LF01745	B-14	720	Air	<7.0	<0.004	2***	17.50	0.0094	0.0094
12/22/01	LF01746	T-15	720	Air	<7.0	<0.004	1***	8.75	0.0047	0.0047
12/22/01	LF01747 ^(a)	T-16	1386	Air	<7.0	<0.002	0	<8.75	<0.0024	<0.0024
12/22/01	LF01748	O-17	720	Air	<7.0	<0.004	0	<8.75	<0.0047	<0.0047
12/22/01	LF01749	O-18	720	Air	<7.0	<0.004	0	<8.75	<0.0047	<0.0047
12/22/01	LF01750	MPHS-20	720	Air	<7.0	<0.004	0	<8.75	<0.0047	<0.0047
12/22/01	LF01751	Lot Blank	0	Air	<7.0	n/a	NA ⁽²⁾	NA ⁽²⁾	NA ⁽²⁾	NA ⁽²⁾
12/22/01	LF01752	Trip Blank	0	Air	<7.0	n/a	NA ⁽²⁾	NA ⁽²⁾	NA ⁽²⁾	NA ⁽²⁾

Key:

* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading

** Structure (S) is roughly equivalent to fiber (f)

*** Chrysotile

**** Extremely low sample volume collected

NA⁽¹⁾ - Not analyzed due to overloading of particulatesNA⁽²⁾ - Not analyzed for TEM

n/a - Not applicable

NC - Sample not collected

NS - Sample not submitted

^(a) - Sample LF01747 (T-16) was collected 12/22/01 1005 to 12/23/01 0911

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94

Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)

Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

FK-12-22-01-am

NYC Response

Asbestos Air Sampling Results for WTC Extended Network

Sampling Date and Time: 12/22/01 1200 to 2400 and 12/21/01 1200 to 2400 (for sample 7093-15-0084)

Data Validation Date: 12/30/2001

Sampling Date	Sample No.	Sampling Location	Sample Volume (L) **	Matrix	PCM by NIOSH 7400			TEM (AHERA)			
					f/mm ²	f/cc	Structures (#)	S/mm ²	S-f/cc*		
12/22/01	7093-18-0086	Park Row	1440	Air	<7.0	<0.002	0	<16.00	<0.0043		
12/22/01	7093-19-0086	Chambers Street	1440	Air	<7.0	<0.002	0	<16.00	<0.0043		
12/22/01	7093-20-0086	Coast Guard	1408	Air	<7.0	<0.002	0	<16.00	<0.0044		
12/21/01	7093-15-0084	Manhattan IS #143	1440	Air	<7.0	<0.002	0	<16.00	<0.0043		
12/22/01	7094-09-0075	Bronx PS #154	1440	Air	<7.0	<0.002	0	<16.00	<0.0043		
12/22/01	7096-12-0080	Queens PS #199	1440	Air	<7.0	<0.002	0	<16.00	<0.0043		
12/22/01	7095-98-0081	Brooklyn PS #274	1136***	Air	<7.0	<0.002	0	<13.33	<0.0045		
12/22/01	7097-18-0078	Staten Island PS #44	1440	Air	<7.0	<0.002	0	<16.00	<0.0043		

Key:

*Structure (S) roughly equivalent to fiber (f)

** Sample volume is based on pump reading

*** Sample volume is below recommended limit for TEM analysis

**** Chrysotile

NR - analysis not requested

NS - Sample not submitted for analysis

n/a - Not applicable

NIOSH 7400: Fiber Analysis of Air samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94

Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)

Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

ext-12-22-01pm

NYC Response

Asbestos Air Sampling Results at Fixed Locations
Sampling Date and Time: 12/24/01 0001 to 1200

Data Validation Date: 12/27/01

Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	PCM by NIOSH 7400		TEM (AHERA)		
					f/mm ²	f/cc	Structures (#)	S/mm ²	S-f/cc**
12/24/01	RST-02334	L	720	Air	<7.0	<0.004	0.5µ - 5µ	0	<0.0048
12/24/01	RST-02335	M-1	720	Air	<7.0	<0.004	0	0	<0.0048
12/24/01	RST-02336	M1-Duplicate	720	Air	<7.0	<0.004	0	0	<0.0048
12/24/01	RST-02337	N	720	Air	<7.0	<0.004	0	0	<0.0048
12/24/01	RST-02338	J	720	Air	<7.0	<0.004	0	0	<0.0048
12/24/01	RST-02339	J-Duplicate	680	Air	<7.0	<0.004	1***	8	0.0045
12/24/01	RST-02340	Q	720	Air	<7.0	<0.004	1***	0	0.0048
12/24/01	RST-02341	F	720	Air	<7.0	<0.004	0	0	<0.0048
12/24/01	RST-02342	A	720	Air	<7.0	<0.004	0	0	<0.0048
12/24/01	RST-02343	C	584	Air	<7.0	<0.005	0	0	<0.0059
12/24/01	RST-02344	B	720	Air	<7.0	<0.004	0	0	<0.0048
12/24/01	RST-02345	H	720	Air	<7.0	<0.004	0	0	<0.0048
12/24/01	RST-02346	I	477	Air	<7.0	<0.006	0	0	<0.0065
12/24/01	RST-02347	D	366	Air	<7.0	<0.007	0	0	<0.0084
12/24/01	RST-02348	K	720	Air	<7.0	<0.004	0	0	<0.0048
12/24/01	RST-02349	U	720	Air	<7.0	<0.004	0	0	<0.0048
12/24/01	RST-02350	V	720	Air	<7.0	<0.004	0	0	<0.0048
12/24/01	RST-02351	S	720	Air	<7.0	<0.004	0	0	<0.0048
12/24/01	RST-02352	P	720	Air	<7.0	<0.004	0	0	<0.0048
12/24/01	RST-02353	E	693	Air	<7.0	<0.004	0	0	<0.0044
12/24/01	RST-02354	W	720	Air	<7.0	<0.004	0	0	<0.0048
12/21/01	RST-02355	T ⁽¹⁾	720	Air	<7.0	<0.004	0	0	<0.0048
12/22/01	RST-02356	T ⁽²⁾	672	Air	<7.0	<0.004	0	0	<0.0051
12/24/01	FB122401	Field Blank	0	Air	<7.0	n/a	NA ⁽²⁾	NA ⁽²⁾	NA ⁽²⁾
12/24/01	TB122401	Trip Blank	0	Air	<7.0	n/a	NA ⁽²⁾	NA ⁽²⁾	NA ⁽²⁾

Sampling Locations:

A: NE corner of West Broadway & Barclay
 B: SE corner of Church & Dey St.
 C: Trinity (a.k.a. Church) & Liberty
 C1: SW corner of Broadway & Liberty St.
 D: East end of Albany St. at Greenwich St.
 E: Western end of Liberty St. at South End Ave
 F: Northern median strip of Vesey & West St
 G: Church and Duane St.
 H: South side of Chase Manhattan Plaza at Pine St.
 I: SE corner of Wall St. & Broadway
 J: NE corner of Warren & West St.
 K: West St. & Albany in median strip
 L: On walkway toward North Park rec area (north side of Suyvesant High), access to TAGA bus area

M: Western end of Harrison St. at West St.

(on tree next to bulkhead)

M1: West St. - 50 yards south of Harrison St. at bulkhead

N: South side of Pier 25 (next to volleyball ct)

P: NE corner of South End Ave. & Albany

Q: Barclay & West St. (center island) in proximity to USCG command post

R: TAGA Bus Location

S: Rector & South End

T: Pier 6 Helipoint

U: Pier 6 Exit 2

V: Pier 6 Bus Sign

W: Wash Tent Common Area

Key:

* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading

** Structure (S) is roughly equivalent to fiber (f)

*** Chrysotile

**** Extremely low sample volume collected

NA⁽¹⁾ - Not analyzed due to overloading of particulates

NA⁽²⁾ - Not analyzed for TEM

n/a - Not applicable

NR - Not requested

NS - Sample not submitted

T⁽¹⁾ - Sample collected on 12/21/01 1200 to 2359

T⁽²⁾ - Sample collected on 12/22/01 0001 to 1200

NIOSH 7400: Fiber Analysis of Air Samples via NIOSH 7400, Revision 3, Issue 2, 8/15/94

Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)

Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

NYC Response
Asbestos Air Sampling Results for Staten Island Landfill
Sampling Date and Times: 12/28/01 0756 to 2143
Data Validation Date: 12/30/2001

Sampling Date	Sample No.	Sampling Location	Sample Volume*	Matrix	PCM by NIOSH 7400		TEM (AHERA)			
					f/mm ²	f/cc	Structures (#)	0.5µ - 5µ	S/mm ²	S-f/cc**
12/28/01	LF01835	P-1	720	Air	8.92	0.005	0	1***	8.75	0.0047
12/28/01	LF01836	P-2	576	Air	8.92	0.006	0	0	<7.87	<0.0053
12/28/01	LF01837	P-3	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/28/01	LF01838	P-4	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/28/01	LF01839	P-5	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/28/01	LF01840	P-6	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/28/01	LF01841	P-7	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/28/01	LF01842	P-8	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/28/01	LF01843	W-11	720	Air	10.19	0.005	0	0	<8.75	<0.0047
12/28/01	LF01844	W-12A	720	Air	15.29	0.008	0	0	<8.75	<0.0047
12/28/01	LF01845	W-12B	720	Air	7.64	0.004	0	0	<8.75	<0.0047
12/28/01	LF01846	B-13	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/28/01	LF01847	B-14	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/28/01	LF01848	T-15	720	Air	11.46	0.006	0	0	<8.75	<0.0047
12/28/01	LF01849	T-16	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/28/01	LF01850	O-17	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/28/01	LF01851	O-18	NS	NS	NS	NS	NS	NS	NS	NS
12/28/01	LF01852	O-19	674	Air	<7.0	<0.004	0	0	<8.75	<0.0050
12/28/01	LF01853	MPHS-20	720	Air	<7.0	<0.004	0	0	<8.75	<0.0047
12/28/01	LF01854	Lot Blank	0	Air	<7.0	n/a	NA ⁽²⁾	NA ⁽²⁾	NA ⁽²⁾	NA ⁽²⁾
12/28/01	LF01855	Trip Blank	0	Air	<7.0	n/a	NA ⁽²⁾	NA ⁽²⁾	NA ⁽²⁾	NA ⁽²⁾

Key:

* Sample volume (liters) is below recommended limit for the TEM method; volume is based on pump reading

** Structure (S) is roughly equivalent to fiber (f)

*** Chrysotile

**** Extremely low sample volume collected

NA⁽¹⁾ - Not analyzed due to overloading of particulates

NA⁽²⁾ - Not analyzed for TEM

n/a - Not applicable

NC - Sample not collected

NS - Sample not submitted

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Asbestos Fiber Analysis by Transmission Electron Microscopy (TEM) EPA 40CFR Part 763 (AHERA)
Standard criteria: EPA 40CFR Part 763 (AHERA): 0.01 fiber/cc (PCM), 70 S/mm², volume 1200 L, for 25 mm filter (TEM)

Daily DataRam Particulate Monitoring Summary Sheet
Staten Island Landfill
December 27, 2001

Location	Longitude	Latitude	DataRam ID	Tag #	Logged Points	Elapsed Time	Avg. Time (sec)	Logging Periods	Calibration Factor	STEL ug/m3	Min. Conc. ug/m3	Avg. Conc. ug/m3	Max. Conc. ug/m3
1	-74.199795	40.565139	2226	1	42	10:30:00	10	00:15:00	100	0.0	0.0	122.4	3274.2
2	-74.198262	40.566883	2295	1	43	10:45:00	10	00:15:00	100	0.0	0.0	41	1459.5
3	-74.198685	40.570054	2011	1	42	10:30:00	10	00:15:00	100	0.0	0.0	40.6	732.9
4	-74.201380	40.569790	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
5	-74.205873	40.568892	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
6	-74.207406	40.563818	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
7	-74.205414	40.560434	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
8	-74.203019	40.561915	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0

Daily DataRam Particulate Monitoring Summary Sheet
Staten Island Landfill
December 30, 2001

Location	Longitude	Latitude	DataRam ID	Tag #	Logged Points	Elapsed Time	Avg. Time (sec)	Logging Periods	Calibration Factor	STEL ug/m3	Min. Conc. ug/m3	Avg. Conc. ug/m3	Max. Conc. ug/m3
1	-74.199795	40.565139	2226	1	45	11:15:00	10	00:15:00	100	0.0	20.5	244.8	2355
2	-74.198262	40.566883	2295	1	45	11:15:00	10	00:15:00	100	0.0	0.0	36.4	3032.7
3	-74.198685	40.570054	2011	1	32	8:00:00	10	00:15:00	100	0.0	0.0	23.8	615
4	-74.201380	40.569790	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
5	-74.205873	40.568892	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
6	-74.207406	40.563818	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
7	-74.205414	40.560434	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0
8	-74.203019	40.561915	0	1	0	00:00:00	10	00:15:00	0	0.0	0	0	0

**NO QC EVALUATION HAS BEEN PERFORMED,
DATA VALIDITY IS UNSUBSTANTIATED
AND THE DATA SHOULD BE USED WITH DISCRETION
WTC TEDLAR BAG AIR ANALYSIS, TO-15 MODIFIED METHOD
DRAFT GC/MS Results for 12/29/01**

File Name	NYC607	NYC608	NYC609	NYC610	NYC612	NYC611
Sample Location	Instrument Blank	Tedlar Bag Blank	Washing Tent Ambient Air	Austin Tobin Plaza	North Tower Plume	South Tower Plume
Sample Number			A07280	A07281	A07282	A07283
Sample Height			Breathing Level	Breathing Level	Ground Level	Ground Level
Sample Volume		250 mL	250 mL	250 mL	100 mL	250mL
Reporting Limit (RL)	20	20	20	20	50	20
Sample Conc. Units	ppb _v	ppb _v	ppb _v	ppb _v	ppb _v	ppb _v
Propylene	RL	RL	RL	RL	520	46
Chlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorodifluoromethane	RL	RL	RL	RL	RL	RL
Dichlorotetrafluoroethane	RL	RL	RL	RL	RL	RL
Chloromethane	RL	RL	RL	RL	140	RL
Vinyl Chloride	RL	RL	RL	RL	RL	RL
1,3-Butadiene	RL	RL	RL	RL	RL	RL
Bromomethane	RL	RL	RL	RL	RL	RL
Chloroethane	RL	RL	RL	RL	RL	RL
Trichlorofluoromethane	RL	RL	RL	RL	RL	RL
Isopropyl Alcohol	RL	RL	220	46	RL	60
Acetone	RL	RL	RL	290	530	1400
Trichlorotrifluoroethane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethene	RL	RL	RL	RL	RL	RL
3-Chloropropene	RL	RL	RL	RL	RL	RL
Methylene Chloride	RL	RL	RL	RL	RL	RL
MTBE	RL	RL	RL	RL	RL	RL
trans-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Hexane	RL	RL	RL	RL	RL	RL
1,1-Dichloroethane	RL	RL	RL	RL	RL	RL
Vinyl Acetate	RL	RL	RL	RL	RL	RL
2-Butanone	RL	RL	RL	57	120	150
cis-1,2-Dichloroethene	RL	RL	RL	RL	RL	RL
Ethyl Acetate	RL	RL	RL	RL	RL	RL
Chloroform	RL	RL	RL	RL	RL	RL
Tetrahydrofuran	RL	RL	RL	25	55	RL
1,1,1-Trichloroethane	RL	RL	RL	RL	RL	RL
Cyclohexane	RL	RL	RL	RL	RL	RL
Carbon Tetrachloride	RL	RL	RL	RL	RL	RL
1,2-Dichloroethane	RL	RL	RL	RL	RL	RL
Benzene	RL	RL	RL	RL	650	RL
Heptane	RL	RL	RL	RL	RL	RL
Trichloroethene	RL	RL	RL	RL	RL	RL
1,2-Dichloropropane	RL	RL	RL	RL	RL	RL
1,4-Dioxane	RL	RL	RL	39	RL	32
Methyl Isobutyl Ketone	RL	RL	RL	RL	RL	23
cis-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
Toluene	RL	RL	RL	RL	300	RL
trans-1,3-Dichloropropene	RL	RL	RL	RL	RL	RL
1,1,2-Trichloroethane	RL	RL	RL	RL	RL	RL
2-Hexanone	RL	RL	RL	RL	RL	RL
Tetrachloroethene	RL	RL	RL	RL	RL	RL
Dibromochloromethane	RL	RL	RL	RL	RL	RL
1,2-Dibromoethane	RL	RL	RL	RL	RL	RL
Chlorobenzene	RL	RL	RL	RL	RL	RL
Ethylbenzene	RL	RL	RL	RL	380	RL
m&p-Xylenes	RL	RL	RL	RL	RL	RL
O-Xylene	RL	RL	RL	RL	RL	RL
Styrene	RL	RL	RL	RL	120	28
Bromoform	RL	RL	RL	RL	RL	RL
1,1,2,2-Tetrachloroethane	RL	RL	RL	RL	RL	RL
4-Ethyltoluene	RL	RL	RL	RL	RL	RL
1,3,5-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trimethylbenzene	RL	RL	RL	RL	RL	RL
1,3-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,4-Dichlorobenzene	RL	RL	RL	RL	RL	RL
Benzyl Chloride	RL	RL	RL	RL	RL	RL
1,2-Dichlorobenzene	RL	RL	RL	RL	RL	RL
1,2,4-Trichlorobenzene	RL	RL	RL	RL	RL	RL
Hexachloro-1,3-Butadiene	RL	RL	RL	RL	RL	RL

United States Environmental Protection Agency
Removal Support Team
Air Monitoring Work Sheet



Roy F. Weston, Inc.

EPA Contract No. 68-W-00-113

DATE: 12/29/01 (Early)

RST: P. Adams team

Location	Time	FID (units)	PID (units)	LEL (%)	O ₂ (%)	CO (ppm)	H ₂ S (ppm)	SO ₂ (ppm)	Cl ₂ (ppm)	HCN (ppm)	HCl (ppm)	HF (ppm)	COCl ₂ (ppb)
R	0814	ND	ND	ND	21.0	ND	ND	ND	ND	ND	ND	ND	ND
L	0815	ND	ND	ND	21.0	1	ND	ND	ND	ND	ND	ND	ND
M1	0828	0.1	0.1	ND	21.0	1	ND	ND	ND	ND	ND	ND	ND
N	0837	ND	ND	ND	21.0	ND	ND	ND	ND	ND	ND	ND	ND
J	0844	0.2	ND	ND	21.0	ND	ND	ND	ND	ND	ND	ND	ND
Q	0848	ND	ND	ND	21.0	6	ND	ND	ND	ND	ND	ND	ND
F	0852	1.1	ND	ND	21.0	3	ND	ND	ND	ND	ND	ND	ND
A	0904	ND	ND	ND	21.0	ND	ND	ND	ND	ND	ND	ND	ND
C	0908	1.8	0.9	ND	21.1	1	ND	ND	ND	ND	ND	ND	ND
B	0913	1.0	0.8	ND	21.0	1	ND	ND	ND	ND	ND	ND	ND
H	0922	ND	ND	ND	21.0	ND	ND	ND	ND	ND	ND	ND	ND
E	0928	ND	ND	ND	21.1	3	ND	ND	ND	ND	ND	ND	ND
D	0936	0.9	0.3	ND	21.1	1	ND	ND	ND	ND	ND	ND	ND
K	0945	2.5	0.9	ND	21.0	2	ND	ND	ND	ND	ND	ND	ND
U	0953	ND	ND	ND	21.1	1	ND	ND	ND	ND	ND	ND	ND
V	1001	ND	ND	ND	21.0	ND	ND	ND	ND	ND	ND	ND	ND
S	1016	ND	0.3	ND	21.1	ND	ND	ND	ND	ND	ND	ND	ND
P	1021	1.4	0.5	ND	21.1	1	ND	ND	ND	ND	ND	ND	ND
E	1031	6.2	2.2	ND	21.1	14	ND	ND	ND	ND	ND	ND	ND

Location A: Barklay and West Broadway
 Location B: Church and Dey
 Location C: Liberty and Church
 Location D: Albany and Greenwich
 Location E: Liberty and South End
 Location F: West and Vesey
 Location G: No location
 Location H: Chase Plaza
 Location I: Wall Street and Broadway

Location J: West and Warren
 Location K: Albany and West
 Location L: Shryvesant High School
 Location M1: West and Warren
 Location N: Pier 25 Volleyball
 Location O: No location
 Location P: Albany and South End
 Location Q: West and Murray
 Location R: No asbestos sampling

Location S: Rector and South End
 Location T: Pier 6 Heliport
 Location U: Pier 6 Exit 2
 Location V: Pier 6 Bus Sign
 Location W: No location
 Location X: No location
 Location Y: No location
 Location Z: No location

**United States Environmental Protection Agency
Removal Support Team
DataRAM Monitoring Work Sheet**

Roy F. Weston, Inc.
EPA Contract No. 68-W-00-113

Site: World Trade Center

Sampler: D. Adams

U.S. EPA: Norrell

Date: 12/29/01

RST Site Project Manager Brennan

Location	R	L	N			
DataRAM ID No.	2647	2643	2646			
Flow Rate (Liters / Minute)	2.0	2.0	2.0			
Start Time	0814	0815	0835			
Stop Time	1422	1426	1434			
Run Time (Minutes)	368	371	359			
Minimum Concentration (ug/m3)	9.6	18.8	14.2			
Maximum Concentration (ug/m3)	99.9	174.3	131.2			
Average Concentration (TWA) (ug/m3)	23.2	35.4	23.7			

Gerry Kelpin

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Sent: Monday, December 31, 2001 3:48 PM
Attach: RA_sitrep12-31.wpd; FL-12-19-01-pm.xls; FL-12-20-01-am.xls; FL-12-20-01-pm.xls; FL-12-21-01-am.xls; FL-12-21-01-pm.xls; FL-12-22-01-am.xls; FL-12-22-01-pm.xls; FL-12-23-01-am.xls; FK-12-20-01-am.xls; ext-12-18-01pm.xls; ext-12-19-01pm.xls; ext-12-20-01pm.xls; ext-12-21-01pm.xls; FL-12-25-01-pm.xls; FL-12-26-01-am.xls; FK-12-21-01-am.xls; FK-12-22-01-am.xls; FK-12-23-01-am.xls; FK-12-24-01-am.xls; ext-12-22-01pm.xls; ext-12-23-01pm.xls; FL-12-23-01-pm.xls; FL-12-24-01-am.xls; FK-12-26-01-am.xls; FK-12-27-01-am.xls; FK-12-28-01-am.xls; ext-12-24-01pm.xls; 122001 Daily DataRam.doc; 122701 Daily DataRam.doc; 122801 Daily DataRam.doc; 122901 Daily DataRam.doc; 123001 Daily DataRam.doc; Taga1225.xls; Taga1228.xls; Taga1229.xls; Taga1230.xls; nydr1230.pdf; dir1229.pdf; dir1230.pdf; nydr1228.pdf; nydr1229.pdf; dir1228.pdf
Subject: EPA December 31 Sampling Situation Data Report
 See below for today's report.

(See attached file: RA_sitrep12-31.wpd)

(See attached file: FL-12-19-01-pm.xls)(See attached file: FL-12-20-01-am.xls)(See attached file: FL-12-20-01-pm.xls)(See attached file: FL-12-21-01-am.xls)(See attached file: FL-12-21-01-pm.xls)(See attached file: FL-12-22-01-am.xls)(See attached file: FL-12-22-01-pm.xls)(See attached file: FL-12-23-01-am.xls)(See attached file: FK-12-20-01-am.xls)(See attached file: ext-12-18-01pm.xls)(See attached file: ext-12-19-01pm.xls)(See attached file: ext-12-20-01pm.xls)(See attached file: ext-12-21-01pm.xls)(See attached file: FL-12-25-01-pm.xls)(See attached file: FL-12-26-01-am.xls)(See attached file: FK-12-21-01-am.xls)(See attached file:

1/2/2002

* FK-12-22-01-am.xls)(See attached file: FK-12-23-01-am.xls)(See attached file: FK-12-24-01-am.xls)(See attached file: ext-12-22-01pm.xls)(See attached file: ext-12-23-01pm.xls)

(See attached file: FL-12-23-01-pm.xls)(See attached file: FL-12-24-01-am.xls)(See attached file: FK-12-26-01-am.xls)(See attached file: FK-12-27-01-am.xls)(See attached file: FK-12-28-01-am.xls)(See attached file: ext-12-24-01pm.xls)

(See attached file: 122001 Daily DataRam.doc)(See attached file: 122701 Daily DataRam.doc)(See attached file: 122801 Daily DataRam.doc)(See attached file: 122901 Daily DataRam.doc)(See attached file: 123001 Daily DataRam.doc)

(See attached file: Taga1225.xls)(See attached file: Taga1228.xls)(See attached file: Taga1229.xls)(See attached file: Taga1230.xls)(See attached file: nydr1230.pdf)(See attached file: dir1229.pdf)(See attached file: dir1230.pdf)(See attached file: nydr1228.pdf)(See attached file: nydr1229.pdf)(See attached file: dir1228.pdf)

1/2/2002