



**Department of
Environmental
Protection**

59-17 Junction Boulevard
Flushing, New York
11373-5108

**Christopher O. Ward
Commissioner**

Sent to D. Stanke

April 24, 2003

Board of Directors
114 Liberty Condominium
114 Liberty Street
New York, New York 10006

Dear Board of Directors:

This is to confirm, the Department of Environmental Protection has completed the clean-up activities as per the clean up and monitoring specifications and access agreements for 114 Liberty Street.

Attached please find a copy of the correspondence dated April 18, 2003 received from the United States Environmental Protection Agency regarding the clearance levels at 114 Liberty Street. The enclosure, which summarizes the analytical results, is also attached. The review of the clearance results indicated all primary clearance levels were achieved.

**Robert C. Avaltroni
Deputy Commissioner**

**Bureau of
Environmental
Compliance**

Tel (718) 595-4418
Fax (718) 595-4422

As you are aware from previous correspondences and conversations with Asbestos Control Program staff, the clean up activities were developed for the removal of debris from the collapse of the World Trade Center. The scope of work did not include the removal or remediation of pre-existing building materials.

Staff has identified various locations where suspect asbestos-containing materials (ACM) were present. These materials include thermal system insulation, surfacing material, and vinyl asbestos tiles. The Department did not perform a complete survey or hazard assessment for asbestos. Limited bulk sampling was performed at the first floor commercial space upon the identification of severely damaged material. A copy of the sample results is attached for your records. The area was cleaned and isolated from the remainder of the building. Clearance sampling was not performed in this area.

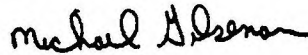


(718) DEP-HELP

Title 15, Chapter 1 of the Rules of the City of New York requires building owners to determine the absence or presence and amount of ACM that may be disturbed during the course of alteration, renovation, modification, demolition, etc. Further, the rules require notification to the Department prior to the start of asbestos abatement activities. A copy of the rules is posted on the Department's web site, www.nyc.gov/dep for your reference.

If you have any questions or need additional information, please contact me directly.

Sincerely,



Michael Gilson
Assistant Commissioner
Bureau of Environmental Compliance

cc. Liberty, LLC
c/o EPIC, LLC
12 East 44 Street
New York, New York 10017



U.S ENVIRONMENTAL PROTECTION AGENCY, REGION II
NEW YORK CITY RESPONSE AND RECOVERY OPERATIONS
290 BROADWAY
New York, NY 10007

APR 18 2003

Mike Gilsenan
New York City Department of Environmental Protection
59-17 Junction Boulevard
11th Floor
Corona, New York 11368

Dear Mr. Gilsenan:

Please find a summary of our evaluation of the analytical data from 114 Liberty Street presented below. A review of the analytical data for asbestos, polycyclic aromatic hydrocarbons (PAHs), dioxin, and lead indicates that the primary clearance levels identified in the work plan have been met in the areas that were cleaned and tested. The secondary clearance level identified in the workplan for fibrous glass has also been met in the areas that were cleaned and tested. The secondary clearance level for crystalline silica was met in 64% of the areas tested; however the remaining areas were similar to background values observed from a USEPA background study. Since all of the primary clearance values have been met, the building can be released back to the owner.

As we discussed, I do suggest that one item needs to be identified in relation to releasing the building to the owner, which is the area that contains the pizza shop. Your staff has identified the area of the building that contains the pizza shop as having asbestos-containing material (ACM). The ACM was considered to be in poor condition, and the NYCDEP has indicated that an asbestos abatement will need to be undertaken in this area. Therefore, this space within the building is not considered to have met the primary clearance value for asbestos.

If you have any questions, please do not hesitate to contact me at 212-637-3116.

Sincerely,

A handwritten signature in cursive script that reads "Kathleen Callahan".

Kathleen Callahan
Assistant Regional Administrator for the
New York Response and Recovery Operations

Enclosure

cc: Krish Radhakrishnan, NYCDEP

Summary of the Analytical Results for the Chemicals of Potential Concern

USEPA's review of the analytical data for samples collected from 114 Liberty Street indicate that the areas sampled meet the numeric criteria established in the workplan (Table 1). The values chosen were established in the draft "World Trade Center Indoor Air Assessment: Selecting Contaminants of Potential Concern and Setting Health-Based Benchmarks" report (i.e., COPC document). The COPC document was created by a committee with representation from federal, state, and city government and was designed to establish numeric criteria to be used in addressing potential contamination from dust and combustion by-products associated with the World Trade Center collapse and fire. This document is currently undergoing peer-review. The data which was evaluated consisted of air or wipe samples for six chemicals, asbestos, polycyclic aromatic hydrocarbons (PAHs), dioxin, lead, fibrous glass, and crystalline silica.

Table 1: Clearance Criteria used for 114 Liberty Street.

<i>Parameter</i>	<i>Clearance Level</i>	<i>Note</i>
Asbestos in air – PCMe	0.0009 s/cc	Primary clearance level
Lead in settled dust	<25 µg/ft ²	Primary clearance level
Dioxin in settled dust	<4 ng/m ²	Primary clearance level
PAHs in settled dust	<300 µg/m ²	Primary clearance level
Fibrous glass in air	<0.01 f/cc	Secondary clearance level
Crystalline silica in air	1 µg/m ³	Secondary clearance level

Each area that was cleaned and sampled met the primary clearance levels identified in the work plan for asbestos, polycyclic aromatic hydrocarbons (PAHs), dioxin, and lead. The secondary clearance level for fibrous glass has also been met in the areas that were cleaned and tested. The secondary clearance level for crystalline silica was met in 64% of the areas tested. The remaining areas were similar to background values observed from a USEPA background study. This is discussed in detail below. Since all of the primary clearance values have been met, the building can be released back to the owner.

There is one item that needs to be identified in relation to releasing the building to the owner, the area that contains the pizza shop. NYCDEP staff has indicated that the area of the building which contains the pizza shop contains asbestos-containing material (ACM). The ACM was considered to be in poor condition and the NYCDEP has indicated that an asbestos abate will need to be undertaken in this area. Therefore, this space within the building is not considered to have met the primary clearance value for asbestos.

Below is a summary of the analytical results for each chemical.

Asbestos – Eighty-eight air samples were collected before and/or during cleaning events. Four samples exceeded 0.0009 s/cc and four samples could not be analyzed due to the filters being overloaded with particulate matter. The before/during cleaning samples were not used to evaluate if additional cleaning was needed.

Seventy-one air samples were collected after first-cleaning event. Ten samples exceeded 0.0009 s/cc and eight samples could not be analyzed due to the filters being overloaded with particulate matter. Based on these results, there were five areas that required additional cleaning and sampling for asbestos. These areas were the 5th, 7th, 8th, 9th, and 10th floors.

Twenty-five air samples were collected from the 5th, 7th, 8th, 9th, and 10th floors after the second-cleaning event. All samples were below the detection limit of 0.0004 s/cc and below the numeric criterion of

0.0009 s/cc. No additional cleaning is required for asbestos. **All of the areas met the primary clearance level for asbestos¹.**

Lead – Thirty pre-cleaning wipe samples were collected and analyzed for lead at a detection limit of 20 $\mu\text{g}/\text{ft}^2$. Thirteen samples were above 25 $\mu\text{g}/\text{ft}^2$ and represent apartments on the 10th floor (2 of 3 above 25 $\mu\text{g}/\text{ft}^2$), 9th floor (2 of 3 above 25 $\mu\text{g}/\text{ft}^2$), 7th floor (1 of 3 above 25 $\mu\text{g}/\text{ft}^2$), 5th floor (2 of 3 above 25 $\mu\text{g}/\text{ft}^2$), 4th floor (2 of 3 above 25 $\mu\text{g}/\text{ft}^2$), 3rd floor (1 of 3 above 25 $\mu\text{g}/\text{ft}^2$), and 11th floor (3 of 6 above 25 $\mu\text{g}/\text{ft}^2$).

Thirty post-first cleaning wipe samples were collected from each floor and analyzed for lead at a detection limit of 9 $\mu\text{g}/\text{ft}^2$. All of the sample results were below 25 $\mu\text{g}/\text{ft}^2$. Post-cleaning concentrations from areas that had pre-cleaning concentrations above 25 $\mu\text{g}/\text{ft}^2$ were all below the primary clearance value. No additional cleaning required for lead. **All of the areas met the primary clearance level for lead.**

Dioxin – Thirty pre-cleaning wipe samples collected and analyzed for dioxin. The maximum Toxicity Equivalents (TEQ) Estimated Maximum Potential Concentration (EMPC) with non-detects equal to 1/2 of the detection limit (ND=1/2) value was 0.951 ng/m^2 . This sample and the remaining 29 samples were all below the primary clearance value of 4 ng/m^2 . Based on the pre-cleaning samples, no additional cleaning required for dioxin.

Thirty post-cleaning wipe samples collected and analyzed for dioxin. The maximum TEQ EMPC (ND=1/2) value was 0.837 ng/m^2 . This sample and the remaining 29 samples were all below the primary clearance value of 4 ng/m^2 . Based on the post-cleaning samples, no additional cleaning required for dioxin. **All of the areas met the primary clearance level for dioxin.**

PAHs – Thirty pre-cleaning wipe samples collected and analyzed for PAHs at a detection limit of 1 μg . All or the results were below the detection limit and the calculated Toxicity Equivalent Factors (TEFs) for each sample was 116 $\mu\text{g}/\text{m}^2$, which is below the primary clearance level of 300 $\mu\text{g}/\text{m}^2$. Based on the pre-cleaning samples, no additional cleaning is required for PAHs.

Thirty post-cleaning wipe samples collected and analyzed for PAHs at a detection limit of 1 μg . All or the results were below the detection limit and the calculated TEFs for each sample was 116 $\mu\text{g}/\text{m}^2$, which is below the primary clearance level of 300 $\mu\text{g}/\text{m}^2$. Based on the pre-cleaning samples, no additional cleaning is required for PAHs. **All of the areas met the primary clearance level for PAHs.**

Fibrous glass – Sixty-five air samples were collected and analyzed for fibrous glass. All of the samples were below the secondary clearance level of 0.01 f/cc. In addition, all of the PCM analyses were below the 0.01 f/cc. PCM analysis results provide another data set that can be used to assess fibrous glass, with the assumption that all detected fibers are fibrous glass, and the PCM data set for 114 Liberty indicates that even if all the fibers from the PCM analysis were fibrous glass, all samples would be below the secondary clearance level of 0.01 f/cc. **All of the areas met the secondary clearance level for fibrous glass.**

Silica – Eleven air samples were collected and analyzed for crystalline silica at a detection limit of 11 $\mu\text{g}/\text{m}^3$. Seven samples were below the detection limit and four samples were above the detection limit, with values of 17.2, 19.6, 22.1, and 22.1 $\mu\text{g}/\text{m}^3$. The numeric criterion that USEPA has proposed in the

¹ This conclusion does not include the area that contains the pizza shop. As discussed in the letter and the summary of the data, the pizza shop contains asbestos-containing material (ACM) that is in poor condition. The ACM will be addressed through an asbestos abatement project.

COPC document, which was adopted as a secondary clearance value for this project, is $1 \mu\text{g}/\text{m}^3$. Although the value chosen for this project was $1 \mu\text{g}/\text{m}^3$, the analytical detection limit available for analyzing crystalline silica in indoor air samples is higher than this value, therefore a result that is below the detection limit is considered to be protective of public health. Four out of eleven samples (36%) were above the detection limit of $11 \mu\text{g}/\text{m}^3$, ranging from 17.2 to $22.1 \mu\text{g}/\text{m}^3$. These values are also above the secondary clearance value.

Although these values are above the clearance value, they are similar to concentrations detected in a background study conducted by USEPA. In the USEPA background study, there was a frequency of detection of 25%, with a range of 4 to $259 \mu\text{g}/\text{m}^3$. Further, the values from the background study without the maximum value of $259 \mu\text{g}/\text{m}^3$, provide a range of 4 to $28 \mu\text{g}/\text{m}^3$. This indicates that the range of values observed in 114 Liberty Street are similar to those observed in the background study. Based on this, it has been determined that the crystalline silica results are similar to background values and therefore additional cleaning is not necessary.

APR-16-2003 15:40

BAMM LABORATORY UNIT

P.02/05

BUREAU OF AIR, NOISE & HAZARDOUS MATERIALS
ASBESTOS/LEAD CONTROL PROGRAM
59-17 JUNCTION BOULEVARD
CORONA, NY 11368

JOEL A. MIELE, SR., P.E.
COMMISSIONER

ASBESTOS CONTROL PROGRAM
BULK ANALYSIS CHAIN OF CUSTODY

Incident No.: TRU0273MN03Date Sampled: 03/27/03Premise: 114 LIBERTY STREETTime: 12:50 am/pmBoro: MANHATTANInspector: R. RAMMECHAN
PrintSign NR MahayTURNAROUND TIME: 24HRS [☒] 48HRS [] 1 WK [] 2 WKS [] 4 WKS []

SAMPLE NUMBER	DESCRIPTION	LOCATION SAMPLED	LAB ID
1. 030327/A078001	FIBROUS MATERIAL	PIZZARIA, ON FLOOR	373
2. 030327/A078002	FIBROUS MATERIAL	PIZZARIA, ON FLOOR	374
3. 030327/A078003	FIBROUS MATERIAL	PIZZARIA, ON FLOOR	375
4. 030327/A078004	FIBROUS MATERIAL	PIZZARIA, ON TABLE	376
5. 030327/A078005	CEMENTITIOUS PLASTER	PIZZARIA, ON DROP CEILING	377
6.			
7.			
8.			
9.			
10.			

ANALYSES REQUESTED: Asbestos PLM [☒] Asbestos TEM [] Lead []

DATE	TIME	ACCEPTED BY	COMMENTS
3/27/03	2:45pm	PRINT <u>Glennda Banton</u>	<u>Safe custody lab</u>
		SIGN <u>Glennda Banton</u>	
		P	
		S	
		P	
		S	
		P	
		S	
		P	
		S	

DEP ACT REV 5/96

ASBESTOS ANALYTICAL REPORT**DEP****DIVISION OF EMERGENCY RESPONSE AND TECHNICAL ASSESSMENT****ASBESTOS LABORATORY****96-05 HORACE HARDING EXPRESSWAY****CORONA, NEW YORK 11368****(718) 595-6309 FAX# (718) 595-6307****ELAP # 11045****TEST METHODS : 1) 40 CFR Part 763, Subpart F, App. A
2) Polarized Light Microscopy plus Stratified Point-Counting Method
3) EPA/600/R-93/116**

Incident #: TRU0273MN03
Inspector : R. RAMMOHAN
Premise : 114 LIBERTY STREET
Boro : Manhattan
Analyst : G. ROMAN

Date Collected: 03/27/03
Received: 03/27/03
Analyzed: 03/27/03

Client #:

DEP Sample #:	30327/A078001	30327/A078002	30327/A078003
Laboratory #:	30327/373	30327/374	30327/375
Location Sampled:	PIZZARIA ON FLOOR	PIZZARIA ON FLOOR	PIZZARIA ON FLOOR
Color:	BEIGE	BEIGE	BEIGE
Homogenous:	Yes	Yes	Yes
Asbestos Present:	Yes	Yes	Yes

Results (%)

Amosite	44.5	Amosite	40	Amosite	50
Fibrous glass	22.2	Cellulose	trace	Cellulose	trace
Matrix	33.3	Fibrous glass	30	Fibrous glass	25
		Matrix	30	Matrix	25

Comments: 1. Sample #005 has 2 types of material.

2. This report has results for the beige cementitious material.

Reviewed by: A. A. Delaney

Laboratory Director

This test report may not be reproduced except with the written approval of this laboratory. The test report relates only to the item(s) listed and does not represent a product endorsement by NVLAP or any other U.S. Government agency.

ASBESTOS ANALYTICAL REPORT

DEP

DIVISION OF EMERGENCY RESPONSE AND TECHNICAL ASSESSMENT

ASBESTOS LABORATORY

96-05 HORACE HARDING EXPRESSWAY

CORONA, NEW YORK 11368

(718) 595-6309 FAX# (718) 595-6307

ELAP # 11045

TEST METHODS : 1) 40 CFR Part 763, Subpart F, App. A
2) Polarized Light Microscopy plus Stratified Point-Counting Method
3) EPA/600/R-93/116

Incident #: TRU0273MN03
Inspector : R. RAMMOHAN
Premise : 114 LIBERTY STREET
Boro : Manhattan
Analyst : G. ROMAN

Date Collected: 03/27/03
Received: 03/27/03
Analyzed: 03/27/03

Client #:

DEP Sample #:	30327/A078004	30327/A078005
Laboratory #:	30327/376	30327/377
Location Sampled:	PIZZARIA ON TABLE	ON DROP CEILING
Color:	BEIGE	BEIGE
Homogenous:	Yes	No
Asbestos Present:	Yes	Yes

Results (%)

Amosite	44.5	Chrysotile	3.1
Cellulose	trace	Quartz	65.4
Fibrous glass	33.3	Matrix	31.5
Matrix	22.2		

Comments: 1. Sample #005 has 2 types of material
2. This report has results for the beige cementitious material.

Reviewed by: *G. Roman*
Laboratory Director

This test report may not be reproduced except with the written approval of this laboratory. The test report relates only to the item(s) listed and does not represent a product endorsement by NVLAP or any other U.S. Government agency.

ASBESTOS ANALYTICAL REPORT

DEP

DIVISION OF EMERGENCY RESPONSE AND TECHNICAL ASSESSMENT

ASBESTOS LABORATORY
96-05 HORACE HARDING EXPRESSWAY
CORONA, NEW YORK 11368
(718) 595-6309 FAX# (718) 595-6307

ELAP # 11045

TEST METHODS : 1) 40 CFR Part 763, Subpart F, App. A
2) Polarized Light Microscopy plus Stratified Point-Counting Method
3) EPA/600/R-93/116

Incident #: TRU0273MN03
Inspector : R. Rammohan
Premise : 114 Liberty Street
Boro : Manhattan
Analyst : G. Roman

Date Collected: 03/27/03
Received: 03/27/03
Analyzed: 03/27/03

Client # :

DEP Sample # : 30327/A078005A

Laboratory # : 30327/377A

Location Sampled: On drop ceiling

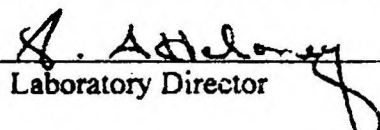
Color : Light brown

Homogenous: No

Asbestos Present: No

Results (%)	Matrix	88
	Fibrous	2
	Quartz	10

Comments: This report has results for the brown cementitious material.

Reviewed by: 
Laboratory Director

This test report may not be reproduced except with the written approval of this laboratory. The test report relates only to the item(s) listed and does not represent a product endorsement by NVLAP or any other U.S. Government agency.

DEP**ASBESTOS ANALYTICAL REPORT****DIVISION OF EMERGENCY RESPONSE AND TECHNICAL ASSESSMENT****ASBESTOS LABORATORY****96-05 HORACE HARDING EXPRESSWAY****CORONA, NEW YORK 11368****(718) 595-6309 FAX# (718) 595-6307****ELAP # 11045****TEST METHODS : 1) 40 CFR Part 763, Subpart F, App. A
2) Polarized Light Microscopy plus Stratified Point-Counting Method
3) EPA/600/R-93/116**

Incident #: TRU0273MN03
Inspector : R. RAMMOHAN
Premise : 114 LIBERTY STREET
Boro : Manhattan
Analyst : G. ROMAN

Date Collected: 03/27/03
Received: 03/27/03
Analyzed: 03/27/03

Client #:

DEP Sample #:	30327/A078001	30327/A078002	30327/A078003
Laboratory #:	30327/373	30327/374	30327/375
Location Sampled:	PIZZARIA ON FLOOR	PIZZARIA ON FLOOR	PIZZARIA ON FLOOR
Color:	BEIGE	BEIGE	BEIGE
Homogenous:	Yes	Yes	Yes
Asbestos Present:	Yes	Yes	Yes

Results (%)

Amosite	44.5	Amosite	40	Amosite	50
Fibrous glass	22.2	Cellulose	trace	Cellulose	trace
Matrix	33.3	Fibrous glass	30	Fibrous glass	25
		Matrix	30	Matrix	25

Comments: 1. Sample #005 has 2 types of material.

2. This report has results for the beige cementitious material.

Reviewed by: A. A. Delaney
Laboratory Director

This test report may not be reproduced except with the written approval of this laboratory. The test report relates only to the item(s) listed and does not represent a product endorsement by NVLAP or any other U.S. Government agency.

ASBESTOS ANALYTICAL REPORT**DEP****DIVISION OF EMERGENCY RESPONSE AND TECHNICAL ASSESSMENT****ASBESTOS LABORATORY****96-05 HORACE HARDING EXPRESSWAY****CORONA, NEW YORK 11368****(718) 595-6309 FAX# (718) 595-6307****ELAP # 11045****TEST METHODS : 1) 40 CFR Part 763, Subpart F, App. A
2) Polarized Light Microscopy plus Stratified Point-Counting Method
3) EPA/600/R-93/116**

Incident #: TRU0273MN03
Inspector : R. RAMMOHAN
Premise : 114 LIBERTY STREET
Boro : Manhattan
Analyst : G. ROMAN

Date Collected: 03/27/03
Received: 03/27/03
Analyzed: 03/27/03

Client #:

DEP Sample #: 30327/A078004 30327/A078005

Laboratory #: 30327/376 30327/377

Location Sampled: PIZZARIA ON TABLE ON DROP CEILING

Color: BEIGE BEIGE

Homogenous: Yes No
Asbestos Present: Yes Yes

Results (%)

Amosite	44.5	Chrysotile	3.1
Cellulose	trace	Quartz	65.4
Fibrous glass	33.3	Matrix	31.5
Matrix	22.2		

Comments: 1. Sample #005 has 2 types of material
2. This report has results for the beige cementitious material.

Reviewed by: *G. Roman*
Laboratory Director

This test report may not be reproduced except with the written approval of this laboratory. The test report relates only to the item(s) listed and does not represent a product endorsement by NVLAP or any other U.S. Government agency.

ASBESTOS ANALYTICAL REPORT**DEP****DIVISION OF EMERGENCY RESPONSE AND TECHNICAL ASSESSMENT****ASBESTOS LABORATORY****96-05 HORACE HARDING EXPRESSWAY****CORONA, NEW YORK 11368****(718) 595-6309 FAX# (718) 595-6307****ELAP # 11045****TEST METHODS : 1) 40 CFR Part 763, Subpart F, App. A****2) Polarized Light Microscopy plus Stratified Point-Counting Method****3) EPA/600/R-93/116****Incident #: TRU0273MN03****Date Collected: 03/27/03****Inspector : R. Rammohan****Received: 03/27/03****Premise : 114 Liberty Street****Analyzed: 03/27/03****Boro : Manhattan****Analyst : G. Roman****Client # :****DEP Sample # : 30327/A078005A****Laboratory # : 30327/377A****Location Sampled: On drop ceiling****Color : Light brown****Homogenous: No****Asbestos Present: No**

Results (%)	Matrix	88
	Fibrous	2
	Quartz	10

Comments: This report has results for the brown cementitious material.**Reviewed by:**
Laboratory Director

This test report may not be reproduced except with the written approval of this laboratory. The test report relates only to the item(s) listed and does not represent a product endorsement by NVLAP or any other U.S. Government agency.