

Summary of Asbestos Sampling Results 70 Battery Place, New York, N.Y. 10280

Date sampled: November 19, 2001

Four locations were sampled at your building: inside two private residences, an indoor common area (e.g., a lobby or hallway), and a nearby outdoor area (see tables below for sampling results). One air sample was collected in each of the four locations, two dust samples were collected outside and one settled dust sample was collected at each of the indoor locations.

Air samples were collected using vacuum pumps to draw air past a filter that was suspended at the height of a person's breathing level. Outdoor dust and debris samples were collected by placing visible material in a container. Indoor dust and debris samples were collected on a filter by vacuuming surfaces. The collected material was weighed, viewed under a microscope, and/or chemically processed to determine the types and quantities of substances present. The materials were analyzed for fibers such as asbestos, fiberglass, synthetics (e.g. man-made materials such as nylon and polyester), cellulose (e.g. cotton, paper), silica, and for other minerals and small particles.

This might be a problem!!

ASBESTOS AIR TEST RESULTS

Results of all of the air samples taken from your building were below the standard set for indoor air quality - 0.01 fibers per cubic centimeter (f/cc) (see tables below). The highest level of fibers in the air at your building was 0.002 f/cc. This air level is comparable to the air results from buildings located above 59th Street, which are not expected to have been impacted by WTC materials. In the homes above 59th Street, levels of fibers found in the air ranged from less than 0.001 f/cc to 0.003 f/cc. This indicates that the air levels for fibers from your building are similar to those seen in areas not impacted by the dust from the WTC collapse.

The air samples tested from directly outside and in the lobby of your building were taken during normal daily activity. The two air samples from the unoccupied apartments were taken after the dust in the apartment was aggressively "stirred up" to ensure that an accurate sample of particles would be present. All air samples were examined in a laboratory for fibers using the Phase Contrast Microscopy (PCM) method.

Airborne fibers as determined by PCM analysis: An air sample is collected by pulling air through a filter. The filter catches fibers and is sent to a laboratory to determine what types of fibers were in the air. Phase contrast microscopy identifies fibers based on size and shape, but not the specific type of fiber. Therefore, the fibers seen by PCM include asbestos fibers as well as other fibers, such as textiles, fiberglass, cellulose, which might be present in your home. The PCM analysis assumes that all fibers present were asbestos. Therefore, less hazardous fibers that may have been present, such as textiles or fiberglass, are counted along with the asbestos fibers, and the total

Summary of Asbestos Sampling Results
Address: 70 Battery Place

Page 2 of 3
Date sampled: November 19, 2001

fiber count is then compared to the asbestos standard. If the levels had been elevated using the PCM methodology, additional analysis would have been performed to determine whether any of the fibers were asbestos.

Results of Phase Contrast Microscopy (PCM) testing of air at 70 Battery Place, Nov. 19, 2001

Area Sampled	Outside	Common	Residence 1	Residence 2
Sample Numbers	A-O-10	A-C-10	A-R1-10	A-R2-10
Concentration of Fibers (f/cc)* at 70 Battery Pl.	0.001	0.002	0.001	0.001
Concentration of Fibers (f/cc) in comparison locations	<0.001 to 0.001	<0.001 to 0.002	<0.001 to 0.003	<0.001 to 0.003
NYC Re-occupancy Standard (f/cc)	0.01	0.01	0.01	0.01

* f/cc is fibers in each cubic centimeter (cc) of air. This is calculated from the number of fibers seen on the air filter and the volume of air pulled through the filter measured in cubic centimeters of air.

ASBESTOS DUST TEST RESULTS

The dust and debris samples were examined by two different laboratory methods for asbestos fibers, Polarized Light Microscopy (PLM) and Transmission Electron Microscopy (TEM). PLM is used to define asbestos containing material in dust and debris. A material is considered to be asbestos containing material if it contains more than 1% asbestos using the PLM method. The PLM method only counts the larger asbestos fibers. Therefore, if results by PLM were not greater than 1% asbestos, the sample was then analyzed by the TEM method that does count the smaller fibers. However, TEM analysis is not used for regulatory purposes for dust samples.

While a low level of asbestos was detected in some of the dust samples from your building, this was only from the dust samples from outside and in a small area of the lobby. Low levels of asbestos (less than 1%) were found in one visible dust outdoor sample. Slightly higher levels were found (1.5%) in a vacuum dust in the lobby, although no visible dust was observed. However, since there is variability in laboratory analyses, the sample with 1.5% asbestos was reanalyzed and upon reanalysis, levels were <1% asbestos. No asbestos fibers were found in the dust samples from the two residences.

Fibrous materials in dust found by PLM analysis: Polarized Light Microscopy identifies asbestos fibers by shape and optical characteristics. Other fibers such as fabric (synthetics), paper

This section needs work - be re-ordered for clarity - (ie: talk about how first with results then TEM with results).

Summary of Asbestos Sampling Results**Address: 70 Battery Place****Page 3 of 3****Date sampled: November 19, 2001**

(cellulose) and fiberglass may be identified in the analysis. The laboratory analyst counts the fibers present to give an estimate of fiber content as a percent. PLM is used for regulatory purposes for dust samples.

Results of Polarized Light Microscopy (PLM) testing of dust at 70 Battery Place, Nov. 19, 2001

Area Sampled	Outside	Outside*	Common	Residence 1	Residence 2
Sample Numbers	SA-O-10	SA-O-X-10*	VA-C-10	VA-R1-10	VA-R2-10
Asbestos fibers (%)	None Detected	None Detected	None Detected	None Detected	None Detected

* Denotes a second sample taken in the same location for quality control purposes.

Asbestos in dust as determined by TEM analysis: TEM analysis was conducted on all dust samples that showed asbestos content by PLM as less than 1%. TEM analysis is very specific, can detect smaller fibers of asbestos, and is sensitive to less interference. This analysis was done to confirm the PLM findings of no asbestos shown above. However, TEM analysis is not used for regulatory purposes for dust samples.

Results of Transmission Electron Microscopy (TEM) testing of dust at 70 Battery Place, Nov 19, 2001

Area Sampled	Outside	Outside*	Common	Residence 1	Residence 2
Sample Numbers	SA-O-10	SA-O-X-10*	VA-C-10	VA-R1-10	VA-R2-10
Asbestos fibers (%)	None Detected	< 1%	1.5 % < 1%**	None Detected	None Detected

* Denotes a second sample taken in the same location.

** Denotes re-analysis of original sample for quality control purposes.

Needs a concluding summary

TOTAL P.06

CITY_21MC100_006638814