NYC 9/11 Public Portal Document

Bldg 6 22 a Check DOH spreadsheet OK

Summary of Asbestos Sampling Results
225 Rector Place, New York, NY 10280

Date sampled: November 16, 2001

Four locations were sampled at your building: inside two private residences, an indoor hallway, and a nearby outdoor area (see tables below for sampling results). Air samples were collected in each of the four locations by using vacuum pumps to draw air past a filter that was suspended at the height of a person's breathing level.

One settled dust sample was collected at each of the indoor locations. Indoor dust and debris samples were collected on a filter by vacuuming surfaces. Outdoor dust samples were collected only when there was visible dust and debris to obtain bulk material. No dust was available for bulk sampling outside of your building.

The collected material was weighed, viewed under a microscope, and/or chemically processed to determine the types and quantities of substances present. The materials are being 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.

ASBESTOS AIR TEST RESULTS

The air samples tested from directly outside and in the hallway of your building were taken during normal daily activity. The two air samples were taken from the unoccupied apartments after the dust in the apartments was aggressively "stirred up" to ensure that an accurate sample of particles would be present. Both the hallway and the apartments had been cleaned since September 11th. All air samples were examined in a laboratory for fibers using the Phase Contrast Microscopy (PCM) method.

Results of all of the air samples taken from your building were within 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, found in an unoccupied residence. All of the air levels sampled in your building are similar 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.

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 the number of fibers 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 fiber count is then compared to the asbestos standard. If the results were above 0.003

NYC 9/11 Public Portal Document

f/cc using the PCM methodology, additional analysis was performed to determine whether any of the fibers were asbestos. In this building, additional analysis was not warranted since the air sampling results were not greater than 0.003 f/cc.

Results of Phase Contrast Microscopy (PCM) testing of air at 225 Rector Pl, Nov. 16, 2001

Area Sampled	**Outside**	**Common**	**Residence 1**	**Residence 2**
Sample Numbers	A-O-6	A-C-6	A-R1-6	A-R2-6
				A-R2-X-6*
Concentration of Fibers at 225 Rector Pl (f/cc)**	< 0.001	< 0.001	< 0.001	< 0.001
				0.002 *
Concentration of Fibers (f/cc) in air at 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**

* Denotes a second air sample taken in the same location for quality control purposes.
** 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.
*** New York City Department of Environmental Protection asbestos clearance criteria for post-abatement work (Rules of the City of New York, Title 15, Chapter 1)

ASBESTOS DUST TEST RESULTS

In general, 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.

No asbestos fibers were found in the dust samples from the hallway or in the two residences by the PLM laboratory method. Not enough dust was found outdoors, so a sample was not collected. Further analysis by the TEM method detected asbestos in the hallway dust at levels of less than 1%. The TEM method did not detect any asbestos fibers in the dust 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 (cellulose) and fiberglass may be identified in the analysis. The laboratory analyst counts

SUBJECT TO PROTECTIVE ORDER NO. 2, SEPT. 2008

NYC-WTC_000176135

NYC 9/11 Public Portal Document

fibers present to give an estimate of fiber content. PLM is used for regulatory purposes for dust samples.

Results of Polarized Light Microscopy (PLM) testing of dust at 225 Rector Pl, Nov. 16, 2001

Area Sampled	**Outside**	**Common**	**Residence 1**	**Residence 2**
Sample Numbers	No Dust Available	VA-C-6	VA-R1-6	VA-R2-6
Asbestos fibers (%)	No Dust Available	None Detected	None Detected	None Detected

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% (if sufficient quantities were available). TEM analysis is very specific, can detect smaller fibers of asbestos, and is subject to less interference. This analysis was done to confirm the above PLM findings of no asbestos found. TEM analysis is not used for regulatory purposes for dust samples.

Results of Transmission Electron Microscopy (TEM) testing of dust at 225 Rector Pl, Nov. 16, 2001

Area Sampled	**Outside**	**Common**	**Residence 1**	**Residence 2**
Sample Numbers	No Dust Available	VA-C-6	VA-R1-6	VA-R2-6
Asbestos fibers (%)	No Dust Available	< 1%	None Detected	None Detected

SUBJECT TO PROTECTIVE ORDER NO. 2, SEPT. 2008

NYC-WTC_000176136