Too wordy

Reas

(1) Reason for eval
(2) Visible DUST? (Summary)
(3)

Nancy C. comments on 7 edits
Was 100 Church tested for dust loading?

DRAFT 40 Worth Street Equipment Astbestos Sampling
Fact Sheet

The New York City Department of Health and Mental Hygiene (DOHMH) has developed this fact sheet to provide information to occupants of 100 Church Street and 40 Worth Street that may be concerned about asbestos testing conducted on certain floors of the buildings. After 11 September 2001 some office equipment from the Mayor's Office of Operations, located on the 20th floor of 100 Church Street, was moved to the 4th floor of 40 Worth Street. This equipment was impacted by potentially asbestos-containing dust from the collapse of the World Trade Center and was tested for asbestos on December 12th and 13th, 2002. [UNCLEAR- WAS THE AIR TESTED ON THOSE DAYS TOO?] Samples of dust collected from inside the equipment did show the presence of asbestos fibers but the initial results of air sampling for asbestos did not indicate an elevated health risk to occupants. Appropriate clean up and further monitoring of affected areas are recommended.

Dust contents Ast-HM-Silica

What sampling has been performed for asbestos at 100 Church and 40 Worth Streets?

- Twenty-eight asbestos micro-vacuum samples were collected by TRC Engineers, Inc. Fourteen (14) samples at 100 Church Street and eleven (11) at 40 Worth Street were collected from inside of representative office equipment that was potentially impacted by dust from the collapse. For each sample, a known surface area of dust was vacuumed and examined by Transmission Electron Microscopy (TEM), which can specifically detect the presence of asbestos fibers.
- Following the micro-vacuum sampling, TRC conducted air sampling for asbestos. [WHEN?] Samples were collected from the ambient workspace air and from personal monitors attached to workers in the space. Ambient air samples were analyzed by TEM. Personal samples were analyzed using Phase Contrast Microscopy (PCM). The PCM method identifies total fibers in the air but cannot identify asbestos specifically. These samples were then also analyzed by TEM to determine if any fibers present were asbestos.
- Additionally, air samples will be analyzed for the presence of silica, total dust, and metals. when? awaiting results

Refs

What were the results of sampling ~~and what do they mean?~~

Micro-Vacuum Samples

- Table 1 shows the results for micro-vacuum samples taken from inside equipment at 100 Church Street. The ~~geometric mean concentration for that location~~ was 6,311 structures per ~~centimeter squared (str/cm^2)~~.

The range of the samples . . . .

Below detection limit ??

Equipment	Concentration (str/cm^2)
Copiers (6)	<1,596 to 118,078
CPUs (2)	<997 to 17,020
Monitors (2)	1,330 to 1,834,990
UPS	<1,330
Server	15,358
Fax machine	4,787
Plotter	29,918

- Table 2 shows the results for micro-vacuum samples taken from inside equipment at 40 Worth Street. The ~~geometric mean concentration for that location was 11,561 str/cm^2~~. Range . . . .

unnecessary

Equipment	Concentration (str/cm^2)
CPUs (3)	7,978 to 136,960
Printers (2)	<2,128 to 6,383
Projector	<1,596
Scanner	4,787
Monitor	136,960
Laptop computer	19,547
Copier	51,061
Fax machine	3,191

There are no standards for asbestos in surface dust.

Here is ambient asbestos in urban areas. It comes from...

- Standards do not exist for the presence of asbestos in dust collected using the micro-vacuum method. Guidance values are limited due to a lack of information and have generally been applied to accessible surfaces (not the inside of office equipment). The presence of asbestos fibers in a micro-vacuum samples collected from an urban environment is not unusual. In one of very few studies done (**still trying to obtain more info here**), the geometric mean of outdoor dust in urban environment was 5,100 str/cm^2. To find dust containing asbestos structures in electronic equipment is probably not unusual, although some of the high values obtained suggest contamination. The relationship between the levels found and health effects is unknown.

Make a separate question. What are the standards? What do these results mean?

What are the health implications?

Air Samples

- The results of the airborne asbestos sampling in workplace air indicated that airborne asbestos levels were below the Asbestos Hazard Emergency Response Act (AHERA) standard of 70 structures per square millimeter (str/mm^2) or 7,000 str/cm^2. The seven samples were all less than 70 str/mm^2 (five below detection and two at 13.33 str/mm^2). The AHERA standard is used to decide when children may re-enter school buildings following asbestos-removal activities.
The results of personal air samples were within the US and New York City re-occupancy standard for asbestos in community and residential buildings of 0.01 asbestos fibers/cubic centimeter (f/cc) in indoor air. Both samples contained less than 0.002 f/cc (the detection limit) and no asbestos fibers were present. **I will also put in the OSHA Std.**

The diseases associated with asbestos are lung cancer, mesothelioma. We know about these risks from studies of people exposed to asbestos over long periods of time. However, known sources should be minimized

What were the air results?

What are occupational standards? Are there other standards? (AHERA)

- Results of the silica, total dust, and metals analysis are pending.

Do these results mean I have been exposed to dangerous levels of asbestos?

No. Asbestos is generally a health risk when it is airborne. ~~As the air sampling levels detected at 40 Worth Street are less than the AHERA and re-occupancy standards~~ It is unlikely that exposure to asbestos at these locations has posed a health risk. . ~~The asbestos fibers that were detected in the office equipment were detected when the machines were open and then tested and thus exposure is unlikely. Also, we do not know what levels of asbestos using the microvacuum technique that was used to sample the equipment are associated with health effects.~~ It is also important to note that a person's exposure to and health effects from asbestos depend on residence, occupation history, hobbies, individual susceptibility, and other factors. Most people who develop asbestos-related health problems have had a long-term occupational exposure to asbestos. Cigarette smoking dramatically increases the health risks of asbestos.

To further reduce any potential exposure to asbestos on occupants, all equipment that was impacted by the World Trade Center collapse will be discarded or cleaned by licensed asbestos abatement contractor. **is this true?????.**

How can I get more information about asbestos?

General information regarding asbestos, asbestos standards, and guidelines can be accessed though the following Internet sites:

Environmental Protection Agency (EPA) at: http://www.epa.gov/asbestos/

NYC Department of Environmental Protection at: http://www.nyc.gov/html/dep.html

NYC Department of Health and Mental Hygiene at:
http://www.nyc.gov/html/doh/html/ei/eiasbest.html

Information can also be obtained by calling DOHMH Environmental and Occupational Disease Epidemiology at (212) 788-4290.