From Saver n

NOTES and Q & A
(Version 10/2 4:00 pm)

NEW TODAY!! As of October 2,2001

Disaster Unemployment Assistance (DUA)
Disaster Unemployment Assistance (DUA) is available from the New York State Department of Labor for persons whose jobs or homes are in the five counties. Telephone Claims can be made at 1-888-209-8124. The filing deadline for DUA claims is Thursday, October, 11, 2001.

Vehicular Access:
Roads in lower Manhattan east of Broadway have been reopened to certain vehicles as of 6 p.m. Monday (10/1/01). Taxis, livery cabs, buses, delivery trucks and vehicles owned by local residents will be allowed past the police checkpoint at Canal Street, however, no traffic is allowed directly on Broadway.

Windows of Hope Family Relief Fund for Families ofRestaurant Workers
A fundraising organization called Windows of Hope Family Relief Fund has been established to to assist the families of the victims who were either employees of Windows on the World or were workers in other food establishments in the Tower complex. The fund is a 501(c)3 charitable fund administered by JP Morgan Chase & Co. and David Berdon & Co., LLP. More information can be accessed at www.windowsofhope.org The group is also coordinating fundraising efforts among restaurants throughout the City that were not directly affected by the disaster.

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1) ACCESS

→ *BUILDING ACCESS*

Q: What areas of downtown are open for business?
A: Personal and/or business identification may be required for access below Canal Street. The area just west of Broadway Street (West Side entrances from 217 Broadway are accessible), south of Murray Street (inclusive) and north of Rector Street (inclusive) (the "Red Zone") will be closed until further notice. In some circumstances these buildings can be accessed with an escort. (See next section for information on entering specific buildings.)

Without an escort, you can access the area through and including Chambers Street (to Greenwich Street), Broadway and south of Rector Street (NOT including either side of Rector Street). It is requested that only those with business or residential needs go to the area so as not to disrupt clean-up efforts. *Tenants should verify that their building is indeed open with their building managers if they are returning for the first time.*

Please check the media and nyc.gov for updates. Tenants should contact their property managers to determine when their facilities will be open for business.

Q: When can we get into our specific building?
A: We suggest that you contact your property manager for information. If you do not know the name of your property manager, check the list of partial contacts by building address available at www.nyc.gov under Business Services Information/Building Access. (This list will be updated periodically as new information becomes available.) If for some reason your property manager needs further assistance, he/she may call us, and we will do our best to refer them to the appropriate resource. *NOTE TO CALL HANDLER If the building manager cannot be found we are keeping a list here and updating it periodically on the NYC.gov web site. If someone has information on their Property Manager, please collect the contact information and see the Coordinator (here at Metrotech Center) so that it can be added to our list.*

Note on 225 Broadway: Abe Tesser (Property Manager) of ***225 Broadway*** *can be reached at 646-483-9230, 646-483-9393, 646-483-9321.*

Buildings outside the restricted area ("red zone") can generally be accessed, at the discretion the property manager. Inside the restricted area ("red zone") there is limited access for essential personnel to remove essential items. We DO NOT know when long term re-occupancy will be allowed. If a tenant needs emergency access they should do the following:

1. Contact their property manager. *(Give them the name and number if we have it – on Prop. Mgrs. List)*
2. Proceed to the police escort checkpoint at the corner of Fulton and Broadway. Bring 2 forms of valid ID that indicate the connection to the requested building. **Property managers and commercial tenants should NOT go to 110 Maiden Lane.**
3. NYPD staff at Broadway and Fulton will provide Property Managers and their tenants a police escort to their building.
4. Residential tenants should also go to the intersection of Broadway and Fulton Street. The NYPD will arrange escorts to buildings from a temporary command post. *Please note that this hotline is intended to assist businesses and may not have accurate information for residents.*

5. Residents and contractors seeking access to Battery Park City at Albany Street and below should go to Battery Place and First Place (near Bowling Green subway stop).

Please be advised that changes to the access policy are necessary from time to time as determined by emergency personnel. Those with respiratory conditions, heart conditions or those who are pregnant are NOT advised to enter the area as there is still significant smoke and debris.

Please note that **NO ACCESS** will be permitted to the following buildings:

- All former World Trade Center Buildings (1-7, North Bridge)
- 90 West Street
- 130 Liberty Street
- St. Nicholas Greek Orthodox Church
- 30 West Broadway
- 130 Cedar Street

Q: How can Battery Park City Residents gain access to their buildings?

A: Information on access and services in Battery Park City (including access, transportation, and retail services) is being provided at www.batteryparkcity.org The following residential buildings have been reopened in Battery Park City, per Mayor Giuliani's approval:

- Tribeca Pointe, 41 River Terrace
- Liberty Court, 200 Rector Place
- Tribeca Bridge Tower, 450 North End Ave.
- South Cove Plaza, 50 Battery Place
- 22 River Terrace
- River Watch, 70 Battery Place
- 400 Chambers Street
- Cove Club, 2 South End Avenue
- Liberty Terrace, 380 Rector Place
- The Regatta, 21 South End Avenue
- Battery Pointe, 300 Rector Place
- Liberty View, 99 Battery Place
- Hudson Towers, 350 Albany Street
- The Soundings, 280 Rector Place
- River Rose, 333 Rector Place
- Hudson View West, 300 Albany St.
- Liberty House, 377 Rector Place
- Parc Place, 225 Rector Place

The best way to access buildings that are open at this time is from Bowling Green, which is now accessible by the 4 and 5 subway lines. Only pedestrian traffic is allowed. Residents should check with their building managers for details about regaining access to their specific building.

The remaining buildings – Gateway Plaza and Hudson View East – are not yet ready for occupancy. Residents should contact their building management for updates in status.

Check with Property Manager: Hudson Towers

Park Place

Gateway Plaza Information:
For the latest information on the Gateway buildings, you can call Lefrak at (718)575-4881, or check their Web site at http://www.lefrak.com.

South Neighborhood residents can enter Battery Park City via Battery Place. Only pedestrian traffic will be allowed. Residents should check with their Property Managers for more detail about specific buildings.

We have no further information with respect to long-term occupancy at this time.

→ VEHICLE ACCESS

Q: Can I get a vehicle into Midtown Manhattan?

To help improve traffic flow in New York City, effective Thursday morning, September 27, single occupancy vehicles are barred from entering Manhattan via any bridge or tunnel with an entry point south of 63rd Street between 6 am and 12 noon on Monday through Friday. This does not apply to vehicles already located within the Borough of Manhattan, or in any of the other boroughs or inter-borough crossings including the East River.

These vehicle restrictions will be in force on the following bridges and tunnels:
- Brooklyn Bridge
- Manhattan Bridge
- Williamsburg Queensboro Bridge
- Queens Midtown Tunnel.

Vehicles will be checked at Greenpoint Avenue and at Van Dam Street in Queens, just before the Queens Midtown Tunnel. Vehicles will be checked at each of the DOT-operated East River Bridges: the Brooklyn, Manhattan, Williamsburg and Queensboro Bridges.

Drivers in the following categories will be exempted:
- Cars with commercial plates, official government plates, or NYP plates.
- Vehicles carrying essential emergency medical personnel (i.e. physicians) or other authorized emergency personnel.
- Vehicles with New York City special parking identification permits for the disabled.
- Medallion taxicabs and livery vehicles authorized by the New York City Taxi and Limousine Commission.
- Motorcycles.

A 4,000-vehicle park-and-ride is available at Shea Stadium in Flushing, Queens, with a parking fee of $2. Drivers/passengers can take the #7 subway line or use the park and ride to facilitate car pools.

Q: Can I get a vehicle into downtown Manhattan?

No vehicular access is allowed South of Canal street at this time. The only exception are commercial vehicles making deliveries (see below). On a case-by-case basis the NYPD will evaluate whether or not a business has a "legitimate business need" requiring vehicular access.

Q: How can product deliveries can be made South of Canal Street?

Vans or trucks with commercial plates will be allowed South of Canal street for the purpose of making deliveries ONLY. Drivers must have 2 forms of ID (including business ID) and must present an invoice or bill of lading at one of the two Primary Police Checkpoints located at Broadway and Canal and Broadway and Bowery.

For deliveries south of Chambers Street, vans or trucks should proceed to South Street and Catherine for the police checkpoint. Drivers must have 2 forms of ID (including business ID) and must present an invoice or bill of lading.

All vehicles will be searched.

→ CONTRACTOR ACCESS

Q: If I am a Contractor (i.e., repair/cleanup), how can I get access south of Canal Street in both the Frozen Zone AND the non-frozen zone?

A: For all buildings south of Canal Street, contractors must come to the NYPD command post at Broadway and Fulton Street to arrange contractor access.

Contractors must meet the following requirements:

- All employees MUST have 2 forms of ID including their company ID
- All Contractors must provide a list of their workers names and SS#s
- Contractors must have a written work order from the Property Manager or Building Owner
- Contractors MUST return to the NYPD checkpoint for every shift. They will not be allowed to apply for approval for all of their shifts at one time; each shift will be approved separately by the NYPD for access.

Contractors can obtain vehicle access to these buildings at the Fulton and Broadway checkpoint. To do so, the person in charge must walk the documentation (work order, etc.) the Fulton and Broadway escort post. A NYPD escort will be arranged for the vehicle from that point. Vehicles can enter into the non-frozen zone through the NYPD checkpoints at Catherine Slip and South Street. Vehicles should then proceed to Broadway and Chambers to await escort.

Please note that contractors working on recovery and rescue efforts only must report to I.S. 89 with the same credentials listed above. I.S. 89 is located at 201 Warren Street.

Q: If I am a contractor for Battery Park City, how can I get my work crew and vehicle to the site?

A: Information on access and services in Battery Park City (including access, transportation, and retail services) is being provided at www.batteryparkcity.org All buildings except Gateway Plaza and Hudson View East are open.

Only contractor vehicles with work orders in the vicinity will be allowed vehicle access at the police checkpoint at Battery Place and First Place. All drivers need to bring two forms of ID and a work order or bill of laden that specifies the reason for entering the zone and the address of the delivery or service and the nature of the cargo. All vehicles will be searched.

2) WALK-IN CENTER SERVICES

Tables for the following organizations are manned during the indicated hours at the 110 Maiden Lane Walk-in Center:

FEMA - 8 am to 7 pm

DEP - 8 am to 7 pm

SBA - 8 am to 7 pm

Con Edison - 8 am to 7 pm

Verizon - Weekday: 9 am to 5 am, Weekend: 10 am to 3 pm

Free Legal Advice – 9 am to 6 pm

3) UTILITIES

There is a walk-in center set up at **110 Maiden Lane** for businesses in lower Manhattan. Verizon and Con Edison will be on site to answer questions. The walk-in center will be open on Saturday and Sunday from 9am to 7pm.

Q: In what sections of lower Manhattan is the electric power on?
A: An interactive map is available at www.nyc.gov to check the status of utilities for your building in Lower Manhattan. Electrical service to buildings east of Broadway has been restored. The area north of Chambers Street and south of Rector Street has also been substantially restored. Some buildings along the boundaries of service may or may not have power. To confirm that your building has electricity, please call:

212-482-1320
212-243-1900
800-75-CON ED

Q: In what sections of lower Manhattan are the phones working?
An interactive map is available at www.nyc.gov to check the status of utilities for your building in Lower Manhattan.

A substantial area south of Canal Street still remains without telephone services. (see map for details). Specific building information can be obtained by calling the following number:

During the week:
Residential customers should call: 212-890-1550
Business customers should call: 212-890-2700

On the weekend:
Business and residential customers: (800) 795 - 8742

Q: Is the water back on?

The water has been restored to downtown. Please call 718-DEP-HELP if you experience any problems. An interactive map is available at www.nyc.gov to check the status of utilities for your building in Lower Manhattan.

4) OFFICE SPACE: NEEDS AND OFFERS

Q: I need office space – what can I do?
A: The Real Estate Board of New York (REBNY) which represents the major owners, managers and brokers of property in Manhattan and throughout the City has established a phone bank to respond to tenants dislocated by the tragedy at the World Trade Center who need office and retail space. Brokers and owners are sending in information regarding available space and staff is using that information to assist the displaced tenants.

Tenants in need of space should call 212-621-9502, 9517, 9527. This space bank is open Monday through Saturday, 9 AM - 6 PM.

Building owners and brokers are providing space availability information to an e mail address established for this purpose: **spacebank@rebny.com**.

If you have temporary (up to12 month) space available send it to spacebank@rebny.com. The e- mail should include contact name, firm, phone and or e- mail address. The space information should contain: market area, exact address, square footage, condition of space including whether there is furniture, phone, internet capacity, shared use of conference space etc

Note to Call Handlers: Please take the caller's information as well for our records and to ensure that everyone's needs are met.

Q: I have office space to lease and/or offer – what do I do?
A: The Real Estate Board of New York (REBNY) has established a hotline to match the needs of affected businesses with available space. Please email spacebank@rebny.com with the square footage you wish to lease or offer, and your full contact information – including weekend information. There is a specific need for temporary meeting space, such as conference rooms and auditoriums. The hotline will be open 9am to 5pm Monday – Friday, call these numbers: (212) 621-9502, 621-9517, or 621-9527.

Note to Call Handlers: Please take the caller's information as well for our records and to ensure that everyone's needs are met. PLEASE GIVE A COPY OF ANY SPACE AVAILABLE TO THE MANAGER.

5) RESTAURANTS, THEATERS, & SMALL BUSINESSES

Q: Is there a special number that restaurants, theaters, and small businesses can call (the number the Mayor referred to)?

A fundraising organization called Windows of Hope Family Relief Fund has been established to to assist the families of the victims who were either employees of Windows on the World or were workers in other food establishments in the Tower complex. The fund is a 501(c)3 charitable fund administered by JP Morgan Chase & Co. and David Berdon & Co., LLP More information can be accessed at www.windowsofhope.org The group is also coordinating fundraising efforts among restaurants throughout the City that were not directly affected by the disaster.

Restaurants, theaters, and small businesses should call Federal Emergency Management Agency (FEMA) at (800) 462-9029.

6) TRANSPORTATION

Q: What is accessible?
Information is available on www.nyc.gov and is updated frequently. The Wall Street area opened to pedestrians this weekend. (See VEHICLE ACCESS above for info on vehicle and deliveries access below Canal Street.) Check www.nyc.gov for details and updates. Also see www.mta.nyc.ny.us

Subway service:
Service on the following lines is suspended: 9, C, N, R, Z. Service on the following lines is normal, though some stations are skipped: 4/5/6, 7, D, F, G, L, Q, S

Regular local service in Brooklyn, Queens, the Bronx, and Staten Island, and north of Canal Street in Manhattan. Below Canal Street, M15 to or from South Ferry and M103 to and from Chatham Square.

All MTA bridges and tunnels are open in both directions with the exception of the Brooklyn-Battery Tunnel which remains closed in both directions. Vehicles are not being permitted below Canal St except as described above under VEHICLE ACCESS.

Metro-North and LIRR are running regularly.

7) FINANCIAL ASSISTANCE

Q: Is there financial assistance available for affected businesses?

A: Several entities are handling the financial assistance related to the recovery:

1) City/State Disaster Loans (the WTC Disaster Recovery Loan Program - more details provided below).

2) The U.S. Small Business Administration (SBA) offers a disaster loan program, and has representatives taking business information and distributing applications at 110 Maiden

Lane (between Pearl and Water) and 633 3rd Avenue (between 40th and 41st). The SBA (1-800-659-2955) has information on their website at www.sba.gov/disaster/newyorkfires.html about financial assistance for disaster recovery. (More details on services below.)

3) The Federal Emergency Management Agency (FEMA) (1-800-462-9029) has a number of loans and services (More details on services below.)

4) The New York City Investment Fund will be posting information on its website about private sector sources at www.nycif.org.

→ City/State Disaster Loans

The City is in the process of setting up the **WTC Disaster Recovery Loan Program** which will provide bridge loans of up to $100,000 within three days of application to businesses and non profits that have suffered economic injury or physical damage. The purpose of these loans is to provide immediate relief to businesses that are waiting for their SBA loans to be processed.

Banks involved in the program will include:

JP Morgan Chase	888-842-8786
Fleet	212-703-1850
Citibank, N.A.	800-328-CITI (2484)
Banco Popular	212-445-1991
HSBC Bank USA	800-975-HSBC(4722)
The Bank of New York	212-527-3731

For more information about the WTC Disaster Recovery Loan Program, and to apply for assistance, business owners may visit the branch office of any participating bank.

→ SBA loans include:

Business Physical Disaster Loans for Small Businesses- Loans to businesses to repair or replace disaster damages to property owned by the business, including real estate, machinery and equipment, inventory and supplies. Businesses of any size may be eligible. Nonprofit organizations such as charities, churches, private universities may also be eligible.
Economic Injury Disaster Loans (EIDL) for Small Businesses - Loans for working capital to small businesses to assist them through the disaster recovery period. These loans cover operating expenses the business could have afforded to pay, if the disaster had not occurred.
Disaster Assistance Loans for Homes & Personal Property Loans to homeowners or renter to repair or replace disaster damages to real estate or personal property owned by the victim. Renters are eligible for personal property losses, only.

→ FEMA services include:

- Disaster unemployment assistance for those out of work as a result of the disaster, including self-employed persons and others not normally eligible for unemployment;

- Business disaster loans to fund repair or replacement of real estate, machinery and equipment, inventory and other assets. For small businesses, low-interest loans may be available for working capital.
- Low-interest loans or grants to repair or replace personal property damaged or destroyed as a direct result of the disaster;
- Low-interest loans or grants for renters or homeowners whose primary residences were damaged or destroyed or who face displacement from their homes as a result of the disaster;
- Crisis counseling to help families and victims deal with the impact of the disaster;
- Help with funeral expenses.

8) TAX INFORMATION

Q: Have tax filing deadlines been changed?
A: Some tax filing deadlines have been changed for affected businesses. Information is available at www.nycp.org and www.nyc.gov under Business Services Emergency Information.

The New York State Department of Tax and Finance and the New York City Department of Finance plan to push back the Deadline for quarterly taxes from companies displaced by and affected by the destruction of the World Trade Center complex. Details on the length of the extension are still being worked out. Please consult www.nyc.gov or www.nycp.org for updates.

The IRS has posted the details of the federal tax extension on its website www.irs.gov. The deadline for filing estimated taxes, which had been September 15, has been postponed one full quarter (until January).

9) INSURANCE AND LEGAL QUESTIONS

Q: What should I do with insurance questions?
A: Contact your insurance company. (for legal questions on insurance, see below.)

Q: Whom should I contact with legal questions?
A: We suggest that you contact the Association of the Bar (ABA) of the City of New York at 212/626-7373 or 212/626-7374 for referral services.

Free legal advice is also available on a walk-in basis at 110 Maiden Lane.

FEMA is also offering legal services at 866-606-0626.

10) EMPLOYMENT AND UNEMPLOYMENT ASSISTANCE

Q: My employees are out of work, whom can I contact to help them find temporary employment?

A: A job bank has been established by the City Dept. of Employment, the City Human Resources Administration, and New York State. The Twin Towers Job Link Hotline is at (718)

557-1332 and is available Monday through Friday between 9 AM – 9pm, and weekends from 9AM to 1 PM. Job seekers can also go in person to any of the three (3) Twin Towers Job Link Centers:

Midtown Manhattan:	**Lower Manhattan:**	**Jamaica, Queens:**
247 W. 54th St. 4th Floor	180 Water Street	168-46 91st Avenue
New York, NY	New York, NY	Jamaica, New York 11432
M-F 9am to 7pm	M-F 10am to 8pm	M-F 9am to 8pm
Sat. 9am to 1pm	Sat/Sun 10am to 2pm	Sat/Sun 9am to 1pm
		(718) 557-6755

Q: I have jobs and need employees – whom can I call for assistance to find temporary staff?
A: A job bank is being created, as described above. Employers should go to www.nyc.gov/twintowersjobs to fill out online form to post an available job. Click on "**add a new job**" then on "**new record**" and fill out as many blanks as possible, if unclear leave blank. If you don't have internet access, we can fax you a form to complete which you should then fax back to (718) 403-1058 "Twin Towers Job Link."

Q: Who can I call to file for unemployment assistance?

Unemployment claims can be filed by telephone with the State Department of Labor at a toll free number (888) 209-8124.

Also, disaster unemployment assistance for those out of work as a result of the disaster, including self-employed persons and others not normally eligible for unemployment, is available from the Federal Emergency Management Agency (FEMA). They can be reached at (1-800-462-9029).

11) NON-PROFIT ASSISTANCE INFORMATION

Q: If I am a non-profit, what resources are available to me?
A. There are three organizations that are providing assistance to non-profits in the affected area:

1) The Non-Profit Coordinating Committee of New York is attempting to help non-profits in the affected area locate needed resources, including space and other forms of assistance. The best thing is to check their website at www.npccny.org or to call them on Monday at (212) 502-4191. You can also email dmeyers@npccny.org with information to post.

2) Seedco will be helping non-profits with short-term loans and financing. Check with them starting on Monday morning – they are at www.seedco.org

3) NpowerNY will be providing technology assistance to non-profits in the affected area. Check with them starting on Monday morning – they are at www.npowerny.org and can also be reached by phone at (212) 677-9622.

12) DONATIONS & CONTRIBUTIONS (Goods & Services)

Q: How can I help?
A: See: www.nyc.gov for suggestions, or call the following numbers for donations:

Blood Donations: 1-800-933-BLOOD

Red Cross:

American Red Cross Disaster Relief
PO Box 3756
Church Street Station
New York, NY 10008
1-800-514-5103

The NYS WTC Relief Fund:

New York State World Trade Center Relief Fund
P.O. Box 5028
Albany, NY 12205
1-800-801-8092

More information on places to donate, see
www.helping.org
www.liberyunites.com
http://www.fema.gov/nwz01/nwz01_101.htm
www.windowsofhope.org

Q: I have equipment or materials to offer. Can you provide my information to people?
A system is still being established to match those in need of services/ equipment with those who are offering it. In the meantime, we can take your information and make sure it gets forwarded appropriately. Please also call back toward the end of the week when a complete system should be in place.

13) MISCELLANEOUS NOTICES & CONTACT INFORMATION

Buildings Department (DOB)
The number for calling DOB is (212) 871-9436. If you have difficulty getting through, we suggest you contact the Borough Offices for assistance (either call or walk-in):

Bronx: 1932 Arthur Ave, 5th Floor – (718) 579-6923
Brooklyn: 210 Joralemon St, 8th Floor – (718) 802-3675
Queens: 126-06 Queens Blvd, 3rd & 4th Floors, Kew Gardens – (718) 520-3422
Staten Island: Borough Hall, 2nd Floor – (718) 816-2310
Manhattan: 60 Hudson Street, 5th Floor – (212) 871-9436

Courts
See http://www.courts.state.ny.us/ Specific questions regarding court operations in New York City should be e-mailed to: TechSupp@courts.state.ny.us 1-800-COURTNY or 1-888-COURTNY Email us at Question@courts.state.ny.us

Death Certificate Information
Families may go to the Family Assistance Center at Pier 94 for help in securing a death certificate. Please call 646-710-6245 or go to www.nyc.gov and click on WTC Death Affidavit Forms/Information.

EDC Request for Proposals (RFP) Deadlines
The deadline for the RFP on City-owned real estate has been extended to Wednesday, October 10th. The deadline for the Whitehall Ferrry Terminal DAS also has been extended to Wednesday, October 10th.

Fulton Fish Market
The Fulton Fish Market is temporarily closed. A temporary market has been set up at Hunts Point. Access to the buildings and offices at the Fulton Fish Market can be attained at the intersection of South Street and Catherine Slip.

Health Advisories
The New York City Department of Health website contains health advisories and cleaning instructions for building owners/managers and tenants. This information may be accessed through www.nyc.gov. For questions on air quality or dust cleanup, contact the Department of Health at (212) 213-1844

Hotlines
NYC Patient Information: 212-560-2730
NYC Police Department Employess 718-677-8238
NYC Firefighters: 718-999-2541
NYC Serivces Hotline: 212-221-8635
Navy Personnel: 877-663-6772
Army Personnel: 800-984-8523
American Airlines: 800-245-0999
United Airlines: 800-932-8555

Locating your Car
Cars near ground zero have been moved to NYC Car Pounds. Call
212-971-0720 or
212-971-0721 or
212-971-0770 or
212-971-0771 and have the license plate number.

To find out if a car was destroyed in the attacks, call (917) 769–2453.

Mail
Post office information for inquiries in lower Manhattan–south of Canal Street: 212-967-8585
Residential and business customers who normally use the Church Street Post Office Station can pick up their mail at the James A. Farley building side lobby at 380 West 33rd Street, between Eighth and Ninth Avenues. Businesses who normally use the Church Street Station should also check bays 15, 16, and 17, near the Postal Police security booth, at the Farley building. Bowling Green is open for those people with zipcodes of 10004 and 10006 to pick up their mail.
Post office information for inquiries in lower Manhattan–south of Canal Street: 212-967-8585

Missing Persons

- Please avoid contacting NYC's 911 emergency number. **The City has established a hotline at 212-560-2730** for individuals who belive that their loved ones to be hospitalized.
- The Greater New York Hospital Association has established a Patient Locator System Database with some information on people affected in the form of a searchable database. You may access this database via a link on www.nyc.gov
- To participate in the DNA collection program, see www.nyc.gov for details

Press Calls/Inquiries

We are not to answer press calls under any circumstances. Please forward the press inquiries:

Matt Higgens	and	Janel Patterson
Mayor's Office		Economic Development Corporation
Press Secretary		Press Office
917-769-4579		(917) 846-3324

Residential Relocation

Commission-free assistance is available for PERMANENT relocations from the following individuals/organizations:
Douglas Elliman: 212-705-1040
Feathered Nest: 212-317-7800
CitiHabitats: 212-685-7777

The city, through this program, will be cleaning a small number of commercial spaces in the unoccupied, uncleaned buildings and will also be cleaning building roofs and facades. FEMA is supporting this program, because there is a need to expedite the work in order to prevent any re-entrainment of debris or dust from the WTC collapse. Re-entrainment could pose increased long-term health threats and slow the economic redevelopment of Lower Manhattan. The removal of the residual dust makes sense now that the recovery efforts at Ground Zero are nearly complete.

U.S. Environmental Protection Agency
Region 2
290 Broadway
New York, New York 10007
Phone (212) 637-3725
Fax (212) 637-3772

TO: Bob Avaltroni

OFFICE:

PHONE:

FAX: (718) 595-4544

FROM: Kathy Callahan

OFFICE:

PHONE: (212) 637-3724

FAX:

DATE: 5/29/02

SUBJECT: WTC Asbestos Issues

Number of Pages (including cover sheet):[Enter NO. OF PAGES included] 8

Message:

5. (Asbestos does not leave buildings with ordinary cleaning methods)

Issue - The asbestos contamination is not going to leave buildings in Manhattan by itself with ordinary cleaning any more than it will in Libby.

Response - It has been the longstanding position of EPA that all WTC related dust should be treated as potentially asbestos contaminated and should be cleaned in a professional manner by HEPA and/or wet methods. Where significant amounts of dust and/or debris exist, NYCDEP has provided guidance to property owners on building clean-up. Where there is minimal dust, NYCDOH has recommended the use of wet cleaning methods and HEPA vacuuming. In conjunction with the NYCDOH, ATSDR is conducting indoor air sampling for asbestos in WTC area residences to, among other things, evaluate the effectiveness of cleaning methods. EPA has supported this study.

6. (EPA's crude air testing cannot detect hazardous levels of asbestos)

Issue - EPA is using the Asbestos Hazard Emergency Response Act (AHERA) transmission electron microscopy (TEM) clearance test and claiming that if it shows 70 or fewer asbestos structures per mm2, then the air is safe.

Response - EPA has utilized the AHERA re-occupancy standards for schools to evaluate the ambient air in Lower Manhattan and elsewhere in New York City to provide information pertinent to long-term public health concerns, and best management practices for the debris removal operations. The AHERA standard of 70 f/mm2 is based on the background contamination of blank asbestos sampling filters. EPA has evaluated the AHERA standard in a risk context, and it meets EPA's criteria for protectiveness (less than a one-in ten thousand excess lifetime cancer risk) for a continuous one year exposure duration. This was estimated to be the reasonable maximum exposure duration for WTC-related contaminants. Also, the AHERA standard has been employed in Libby to determine residential occupancy with the understanding that additional analysis would be performed to evaluate long-term exposure.

7. (EPA's crude air testing cannot detect hazardous levels of asbestos)

Issue - Memo states that 70 f/mm2 (.02 f/cc) is the lowest level that the method (AHERA) can detect.

Response - EPA, in utilizing the AHERA standard, has employed an analytical tool (TEM) that is widely acknowledged to represent the state of the science in airborne asbestos analysis. The AHERA standard of 70 f/mm2 is the school re-entry criteria, not the detection limit. The standard is based on the background contamination of blank sample filters. In effect, the AHERA standard was intended to insure that the remediation of asbestos conataining material (ACM) in schools would be deemed complete when results of air sampling in the impacted area were statististically indistinguishable from background contamination of blank filters. The actual detection limits of TEM are a function of grid openings (i.e., filter area) analyzed and the sampling air volume. As prescribed by AHERA, the method sensitivity is .005 f/cc, not .02 f/cc.

Memo

To: Kathy Callahan, Director, Division of Environmental Planning and Protection
From: Mark Maddaloni, Toxicologist/Risk Coordinator MMM
Date: 2/14/02
Subject: World Trade Center (WTC) Asbestos Issues (Draft)

Contained within are Q & A's that address WTC-related asbestos issues.

1. (Use of PCM-equivalent data from Manhattan for comparison with Libby)

Issue - It has been argued that fibers less than 5 microns (um) in length may cause cancer.

Response - EPA currently utilizes the cancer potency (i.e. inhalation Slope Factor) on its consensus data base, the Integrated Risk Information System (IRIS), to determine cancer risk from asbestos. This Slope Factor is intended for use with phase contrast microscopy (PCM) fibers only (>5 um length) because the epidemiology studies that formed the basis of the dose-response assessment (i.e., Slope Factor) utilized PCM analysis. EPA recognizes, and has acted upon (as described below), the uncertainty related to asbestos risk assessment, especially the factors that contribute to its cancer potency, and is currently re-evaluating the scientific literature on asbestos. For example, EPA is preparing to peer review a scientific approach that assigns greater carcinogenic potential to extremely long fibers (>10 um), but this methodology continues use of 5 um as the minimum fiber length for carcinogenic potential. As part of this initiative, EPA has convened international workshops to evaluate the relationship between fiber dimension/mineralology and the full range (carcinogenic and non-carcinogenic) of asbestos-related health effects.

2. (Comparison of Libby and Lower Manhattan data)

Issue - Contamination exists in an air duct at 105 Duane St. which is three blocks outside EPA's defined "zone of contamination."

Response - EPA never defined either a "zone of contamination" or an exclusion zone during the response to the WTC attack. The exclusion zone definitions, which have changed over time, have been determined by the City of New York. Additionally, the City of New York has taken the

lead role on building clean-up and re-entry and has performed a follow-up investigation of asbestos contamination at 105 Duane Street.

3. (Comparison of Libby and Lower Manhattan data)

Issue - Asbestos concentration in WTC (Ground Zero Task Force Report,10/12/01) apartment dust (f/cm2) is 22 times higher than Libby interior dust samples.

Response - This statement is true in a very limited context, only. At Libby, PCM equivalent fibers in surface dust were estimated using two different methods. The Phase 2 method included only three samples (the highest value, 3,658 f/cm2, was in fact 22 times lower than the highest value 79,000 f/cm2 at WTC). However, the Phase 1 method (which included 258 samples, and is closer in approach to the methodology used at WTC) recorded a value of 22,645 f/cm2, over 6 times higher than Phase 2 results. When the total of all dust samples from Libby are compared to WTC dust samples, the maximum values differ by a factor of less than 4. It should be noted that it would be more appropriate to compare average values rather than maximum values but neither the WTC Ground Zero report or the Libby Endangerment Assessment provided this information. More importantly, the WTC-impacted apartment (45 Warren St.) was vacant and unremediated. Hence, the concentration of asbestos in dust is not representative of actual or long-term exposure.

4. (Comparison of Libby and Lower Manhattan data)

Issue - Why is EPA leaving people to their own devices in the cleanup of NYC, while intervening to clean homes at taxpayers expense in Libby because of an 'imminent and substantial endangerment to the public health'?

Response - First, the comparison of these situations has limited usefullness; the sites are not alike in many respects. In Libby, potential long-term risks are being evaluated under a "no action scenario" to support inclusion on the National Priority List (NPL). NPL listing will enable Superfund trust monies and legal authorities to be used in order to assess years of widespread asbestos contamination resulting from past mining activities. It also provides a means to evaluate remedial options that may be necessary. At WTC, EPA is part of a multi-organization team under the auspices, in a federally declared disaster, of the Federal Response Plan responding to an emergency of unforseen magnitude. Emphasis has been directed toward minimizing the environmental impact through a rapid and comprehensive remediation of WTC-related contaminants. Consequently, long-term exposures are not anticipated because the source material (building remnants and residual dust/debris) is being removed. To assess the impact of the Trade Center collapse, EPA has performed extensive ambient air monitoring for asbestos (24 hours a day, 7 days a week) throughout the WTC area. The City of New York has taken the lead to address indoor asbestos contamination and has partnered with the Agency for Toxic Substances and Disease Registry (ATSDR) to conduct a study of asbestos and other mineral fibers inside buildings. EPA has provided support for this study.

8. (EPA's air testing violates the AHERA protocols)

Issue - EPA is violating the AHERA regulations by using the clearence test (70 f/mm2) without performing specific abatement procedures in advance of applying the 70 f/mm2 standard. Additionally, it is argued that the AHERA clearence test is intended to catch gross contamination problems only.

Response - EPA never intended to strictly adhere to the extensive AHERA regulations governing school asbestos abatement at WTC. As discussed in the previous response, the AHERA standard was utilized as a general indicator of "background" (see previous response) asbestos contamination. While the standard is not specifically applicable to measurements of outdoor air concentrations of asbestos, it was nonetheless considered a reasonable benchmark of asbestos contamination. In effect, the "indoor" clearance test for re-entry into schools was employed to inform evaluation of asbestos sampling data in ambient air around the WTC.

9. (EPA use of 1% asbestos level for cleanups will result in ineffective cleanups)

Issue - EPA and NYCDEP are claiming that only dusts over 1% or more are hazardous.

Response - EPA has stated that if a substance contains 1% or more asbestos it is considered to be an asbestos containing material. This is consistent with regulatory definitons in the National Emission Standards for Hazardous Air Pollutants (NESHAPS) and AHERA. Based upon this definition, NYCDEP has required certain remediation actions on the part of property owners. The hazard posed by asbestos contaminated bulk dust/debris is a function not only of concentration but of total mass of material, re-intrainment potential and the presence of exposed populations. EPA has taken the position that it is prudent to consider WTC related dust as potentially asbestos contaminated. For example, shortly after the disaster, EPA mobilized HEPA vacuum trucks to clean all dust/debris littered streets in the impacted area of Lower Manhattan rather than selectively cleaning streets where results from bulk sampling indicated greater than 1% asbestos.

Issue - In reference to the Libby, Montana mining site, EPA has stated that soils containing less than 1% asbestos are capable of producing airborne concentrations greater than .01 f/cc. It has been further asserted that this concentration (i.e., .01 f/cc) is over the action level for declaring a public health emergency.

Response - The relationship between asbestos concentration in settled material and ambient air is highly variable and is influenced not only by asbestos concentration but also by the total mass of asbestos contaminated material and its re-entrainment potential. Additionally, the determination of a public health emergency is based on the tenets of risk assessment which would consider numerous factors including: fiber dimension as well as concentration, exposure pathways/duration, and actual/potential populations exposed. As a result of the WTC disaster and the subsequent clean-up action, an upper bound exposure duration from WTC-related contaminants was estimated to be 1 year. Based on a 1 year exposure duration, the AHERA

standard of 70 f/mm2 (.02 f.cc) is within EPA's acceptable risk range of one-in ten thousand to one-in a million for carcinogens.

10. (There are no AHERA or other test methods for percent levels of asbestos in thin layers of settled dust)

Issue - Obtaining a percent level of asbestos is not possible when only a fine layer of settled dust is evident. Accordingly, instructions to landlords to determine if dust is greater than 1% asbestos may not be possible.

Response - This point is agreed upon; however, NYCDEP recommendations (9/26/01) advise building owners to use wet cleaning methods and HEPA filters where there is only a "light coating" (i.e, not enough to obtain percent level measurements) of dust. Also, as previously stated, EPA's position has been that all WTC-related dust should be treated as potentially asbestos contaminated.

11. (Current EPA recommendations for Manhattan will leave most asbestos)

Issue - EPA recommendations for interior clean-up, specifically the use of dry HEPA vacuums, are ineffective and unsafe.

Response - The guidance that NYCDOH has provided for carpet cleaning (combination of dry HEPA vacuum and wet methods (i.e., shampoo) is consistent with the recommendations made in a study EPA performed on this subject matter. The report, Evaluation of Three Cleaning Methods for Removing Asbestos from Carpets: Determination of Airborne Asbestos Concentrations Associated with each Method (1993), recommends: "If ACM has been released onto a carpeted area during an operation and maintenance activity or as a result of fallen surfacing material, the gross debris should be removed by a HEPA-filtered dry vacuum cleaner, followed by wet cleaning of the carpet." Additionally, the NYCDOH recommendations are consistent with the following EPA publications that provide guidance on asbestos removal from indoor environments. 1) AHERA (P. 659) states that cleaning of abated areas should be performed according to the following procedures: i) HEPA vacuum or steam clean all carpets.
ii) HEPA vacuum or wet clean all other floors and all other horizontal surfaces.
iii) Dispose of all debris, filters, mopheads and cloths in sealed, leak-tight containers.
2) Managing Asbestos in Place (OPPTS, 1990) recommends (P. 19) that the operation and maintenance of buildings with asbestos containing material should include routine cleaning of floors using wet methods and/or the use of HEPA vacuums.

12. (Disorganized clean-up resulting in re-contamination of previously cleaned areas)

Issue - Concern has been raised that the cleanup is disorganized and is resulting in cross-contamination of previously cleaned areas.

Response - EPA is not aware of significant re-contamination of cleaned areas to date. The NYCDOH, with the assistance of ATSDR and EPA, is conducting indoor dust and air sampling for asbestos in buidings impacted by the WTC disaster to evaluate the effectiveness of apartment/buiding clean-ups. The results of this study may be able to provide information to evaluate the re-contamination issue.

13. (Cleanup using AHERA is not working)

Issue - EPA is trying to use the AHERA statute as the authority for its cleanup. EPA is trying to adapt these insensitive test methods, the AHERA TEM clearance test for air, and the PLM test for % asbestos, to situations which were not intended by the regulations.

Response - EPA has not used the AHERA statute as the authority for its cleanup. The authority for EPA actions at the World Trade Center is the Stafford Act and the Federal Response Plan. The microscopy methodology (TEM) prescribed by AHERA for airborne asbestos was used because it is more sensitive than PCM and is able to distinguish asbestos from non-asbestos fibers whereas PCM can not. As previously discussed, percent mesurements of asbestos in bulk materail by PLM were intended to inform regulatory concerns rather than serve as a measure of risk. Clean-up activities by EPA were conducted as part of its mission assignment in the Federally Declared Disaster. The AHERA standard was used as a benchmark to guage public health protectiveness in an emergency response situation.

14. (PCM-equivalent correction factor)

Issue - Risk assessments for asbestosis should be based on total TEM fiber counts rather than PCM equivalents because ATSDR has reviewed studies showing that asbestosis is associated with shorter asbestos fibers.

Response - The scientific literature indicates that asbestosis (diffuse interstitial fibrosis of the lungs) is associated with chronic, high-dose exposure to asbestos. Historically, the asbestos analysis in occupational studies of highly exposed worker populations was performed by PCM, thereby providing limited information on the role of short fibers in inducing asbestosis. Mechanistically, the ability of pulmonary macrophages to clear short fibers should make them less fibrogenic than longer fibers. The ATSDR Toxicological Profile for Asbestos (2000) states, "A number of animal studies have indicated that long fibers (5 um or more) have a higher

fibrogenic activity, while short fibers have lower fibrogenic activity. This relationship may be associated with the inability of macrophages to engulf and remove fibers that are significantly larger than themselves." However, this same reference also states: "Results from human studies suggests that short asbestos fibers also may be important in causing pulmonary fibrosis. These studies showed that, in groups of chrysotile miners and millers and amosite-exposed shipyard and insulation workers with asbestosis, histologically-graded fibrosis was positively correlated with mean fiber concentration in lung tissue, but was negatively correlated with mean fiber length." More research is needed on the role of short fibers (5 um and less) in asbestosis induction. It should be noted, however, that the AHERA standard of 70 f/mm2 (which counts fibers >.5 um) is well below the asbestos concentration associated with asbestosis.

15. (Cancer risks for Libby compared to Lower Manhattan)

Issue - Risk calculations from the Libby Endangerment Assessment (12/20) are compared to risk estimates from hypothetical scenarios at the WTC.

Response - The risk calculations from the Libby Endangerment Assessment were based on actual asbestos air sampling results (analyzed by TEM) which were subsequently converted to PCME fiber counts. Risk calculations for hypothetical exposure scenarios associated with the WTC have been performed and were based on the asbestos load (f/cm2) of settled dust, rather than air samples. As previously mentioned, the relationship between asbestos concentration in settled dust and ambient air is highly variable and depends on dust re-entrainment potential and ambient conditions (e.g., air exchange rates) as well as asbestos load (f/cm2). In addition, since there was no air sampling for the WTC risk calculations, the conversion to PCME relied on limited indoor sampling data from secondary sources to arrive at a PCME estimation of 20% of total TEM fibers. The 20% value represents the upper bound of the range (1.3% - 20%) of correlations between PCME and total TEM fiber counts from the aforementioned indoor sampling data. Thousands of asbestos air samples in the ambient air collected by EPA since 9/11 indicate that PCME is less than 10% of total TEM fiber counts.

Frequently Asked Questions Related to Air Quality Following the World Trade Center Disaster

I live and/or work downtown. Do I need to be concerned about the air I'm breathing?

Numerous federal, state and local agencies (including the U.S. Environmental Protection Agency, the New York State Departments of Environmental Conservation and Health and the New York City Departments of Environmental Protection and Health) have been working together to monitor air quality within NYC and around the disaster area since 9/11/01 and will continue throughout the period that the work area is being cleaned. Additional monitors are being set up to obtain further information.

Following the collapse of the World Trade Center towers, significant quantities of smoke and dust were released into the air. The plume of smoke contained dust, ash, soot and other burning materials present at the site. Other hazardous materials released into the air include materials such as concrete, gypsum, plastics and fiberglass dusts as well as soot that were released during the explosion and collapse of the towers. From a health perspective, the substances of concern include asbestos and fine airborne particles. Therefore, air tests, to date, have focused on assessing levels of these substances.

Testing since 9/11/01 has revealed that, in general, levels of asbestos and fine airborne particles have been low. Until the WTC area has been cleaned up, air quality will need to be monitored.

What are the most immediate health concerns?

Irritating dusts and gases can worsen medical conditions such as asthma, chronic bronchitis, emphysema, other chronic lung conditions and heart disease. Airborne irritants might also trigger an asthma attack in people who may be susceptible, but who have not had an asthma attack before. The most important concern is however, exposure to asbestos.

What is asbestos and what are its potential health effects?

Asbestos is a naturally-occurring mineral fiber that is resistant to heat. Asbestos has been used in a wide range of manufactured products including building materials such as fireproofing. Asbestos was used in the

construction of parts of the World Trade Center buildings. Asbestos is present in some of the debris at the site and in areas very close to the site.

In workplaces where levels of asbestos exposure are high and persist for many years, health concerns include lung diseases such as asbestosis and cancer. However, when exposures are low and of short duration, the risk of developing an asbestos-related illness such as asbestosis or cancer is extremely low.

What levels of asbestos have been found in the area and how do they compare to health-based standards?
The U.S. and NYC standard for asbestos in community and residential buildings is 0.01 fibers/cubic centimeter (f/cc) in indoor air. For workers, the U.S. Occupational Safety and Health Administration's (OSHA) standard is 0.1 fibers/cc in air.

Sampling for asbestos fibers at the disaster site began on September 11. The EPA is currently sampling at fifteen monitoring locations near the site and in the nearby community, and additional testing is being conducted at other locations by city and state agencies. Results indicate that, as expected, asbestos is present in some of the debris at the site and in areas very close to the site. As of September 21, 2001, most air sampling results near the World Trade Center were below the standards for asbestos in indoor air.

As testing continues, there may be the possibility of occasional short-term increases in levels of asbestos in the air above the residential standard of 0.01 fibers per cubic centimeter of air. Short-term exposures to relatively low levels should not pose a health risk to individuals.

My home and / or office is very dusty. What should I do to clean-up?
For people returning to homes or workplaces refer to the NYCDOH's Advisory Factsheet "Recommendations for People Re-Occupying Commercial Buildings and Residents Re-Entering Their Homes". [posted on their website: www.nyc.gov/health?]

NYC Health Department's clean-up recommendations include:

- All cleaning activities should avoid stirring up the dust and making it airborne.
- Clean with a wet mop or wet rag. Do not sweep with a broom.

- Use a HEPA vacuum, HEPA bags or dust allergen bags with your regular vacuum.
- Keep windows closed when the air outdoors is dusty or smoky.
- Remove shoes before entering your house especially if you've walked through dust or debris.
- Dusty clothing should be bagged and washed separately.
- Clean air-conditioner filter before turning it on.

Is it necessary to have my home or office tested for asbestos?
First, homes or offices should be cleaned of dust and debris by following the recommendations in the NYC DOH's Advisory Factsheet mentioned above. After cleaning, if a home owner or office building manager wants to have an indoor space tested, the environmental services section of the Yellow Pages can be a resource for certified environmental consultants. Consultants should be asked if they are certified to conduct asbestos testing and whether they do indoor air quality tests.

What are fine airborne particles (Respirable Particulate Matter)(PM) in the air?

The explosion at the World Trade Center released fine airborne particles (also called "respirable particulate matter") into the air. Fine particulate matter comes mostly from combustion such as fires, exhaust from cars, trucks, buses and other vehicles, power plants, boilers and other operations that involve the burning of fuel. Particulate matter ranges in size from very small to larger particles. The most commonly measured sizes are $PM_{2.5}$ and PM_{10}. $PM_{2.5}$ refers to particles that are 2.5 microns or less in diameter. These particles are extremely small and therefore more likely to be inhaled deeper into the lungs. PM_{10} refers to larger particles that are 10 microns or less in diameter, and because of their larger size, do not travel as far into the lungs. Some particulate matter continues to be released from the World Trade Center site.

What are the health risks from fine airborne particles (Particulate Matter)
Increased levels of fine airborne particles can cause eye, nose, throat and lung irritation, which can trigger coughing and sneezing. Such exposures may aggravate symptoms for persons with asthma or other underlying respiratory conditions. Symptoms should diminish once exposure ceases.

Are there air quality standards for Fine Airborne Particles in outdoor air?
Yes. In 1997, the United States Environmental Protection Agency (EPA) recommended National Ambient Air Quality Standards for $PM_{2.5}$. National Ambient Air Standards are established to be protective of public health. The short-term standard (24-hour or daily average) for $PM_{2.5}$ is 65 micrograms per cubic meter (ug/m^3). Generally, levels below the standard are considered to have a low risk of adverse health effects. The long-term standard (annual average) is 15 ug/m^3. The short-term standard (24-hour or daily average) for PM_{10} is 150 ug/m^3 and the long-term standard (annual average) is 50 ug/m^3.

Are you monitoring for $PM_{2.5}$?
Yes. The New York State Department of Environmental Conservation (NYS DEC) has had continuous (real-time) air particulate monitors ($PM_{2.5}$) collecting samples at eleven sites in New York City. These routine monitors are two on Staten Island, three in Manhattan, one in Brooklyn, three in Queens and two in the Bronx. The data from these monitors are evaluated daily. The Environmental Protection Agency is setting up additional monitors to collect particulate data ($PM_{2.5}$ and PM_{10}) in the community near the site.

What are the results of the $PM_{2.5}$ monitoring and how do they compare to the levels measured in air before September 11th?

Routine DEC air monitors:
Beginning September 11th at 1:00 pm, the daily average standard of 65 ug/m3 for $PM_{2.5}$ has not been exceeded at any of the routine DEC monitoring locations. On most days since September 11, $PM_{2.5}$ levels at each of the monitoring sites have been similar to those measured earlier in September.

How do the monitoring data for PM2.5 compare to the standards?
Routine DEC monitoring:
As of September 26, the highest daily average level of $PM_{2.5}$ was measured at Public School 64 on September 13th. This school is at East 6th Street and Avenue B and is the nearest routine monitoring site to the World Trade Center. The highest daily average at that location was 42.1 ug/m^3, which does not exceed the EPA's standard of 65 ug/m3. Daily averages of PM 2.5 at all the other routine sites were below 35 ug/m^3.

As the name implies, the annual average standard is based on a year of measurements and, therefore, it is not appropriate to use this standard in evaluating the data collected since the disaster. However, because the data from all eleven sites are consistent with historic data there is no reason to expect this event will elevate the annual average very much.

Should I be concerned about my car if it was parked in the disaster zone?
If your car was parked downtown during the blast on 9/11/2001 it is possible it may have sustained some structural damage and could be very dusty, both inside and outside. Once activity is no longer restricted in the disaster zone, it will be safe to remove your car from the area. If your car sustained structural damage from the blast, have your car towed from the area. Otherwise, you can drive your car out of the area. If you would like to precautions to minimize your exposure to dust, recommended actions include: Wear a dust mask while driving your car to a place for cleaning. Wash the exterior of your car, use a HEPA vacuum to clean the inside, and have an auto mechanic inspect the heater and air conditioning system prior to using these systems.

Should I be concerned about fiberglass in air due to the World Trade Center disaster?
Fiberglass is the trade name for a manmade mineral fiber that also may be called fibrous glass or glass wool. Fiberglass can be found in many different consumer products. In the past it was used for home furnace filters and insulation. Today it is used to insulate pipes and appliances, for sound control in aircraft and automobiles, and in curtains, roofing materials and reinforced plastics.

Fiberglass was most likely used in the construction of the World Trade Center. It has been detected in run-off from the disaster site, suggesting it may have been released during the buildings' collapse. However, air samples taken in and around the World Trade Center site can detect fiberglass if it is present. Extensive air monitoring to date has indicated that fiber concentration in air (including asbestos, fiberglass and cellulose) are low.

What health effects may be associated with short-term exposures to fiberglass particles in air?

Occupational exposure to fiberglass fibers may cause skin irritation and itching because it can get into the skin. It may also cause upper respiratory tract irritation and may aggravate asthma or bronchitis. These are temporary conditions and are unlikely to occur for people in the community given the low concentrations of fibers in the air in general around the WTC disaster area.

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Should I be concerned about my car if it was parked in the disaster zone?
If your car was parked downtown during the blast on 9/11/2001 it is possible it may have sustained some structural damage and could be very dusty, both inside and outside. Once activity is no longer restricted in the disaster zone, it will be safe to remove your car from the area. If your car sustained structural damage from the blast, have your car towed from the area. Otherwise, you can drive your car out of the area. If you would like to precautions to minimize your exposure to dust, recommended actions include: Wear a dust mask while driving your car to a place for cleaning. Wash the exterior of your car, use a HEPA vacuum to clean the inside, and have an auto mechanic inspect the heater and air conditioning system prior to using these systems.

Should I be concerned about fiberglass in air due to the World Trade Center disaster?
Fiberglass is the trade name for a manmade mineral fiber that also may be called fibrous glass or glass wool. Fiberglass can be found in many different consumer products. In the past it was used for home furnace filters and insulation. Today it is used to insulate pipes and appliances, for sound control in aircraft and automobiles, and in curtains, roofing materials and reinforced plastics.

Fiberglass was most likely used in the construction of the World Trade Center. It has been detected in run-off from the disaster site, suggesting it may have been released during the buildings' collapse. However, air samples taken in and around the World Trade Center site can detect fiberglass if it is present. Extensive air monitoring to date has indicated that fiber concentration in air (including asbestos, fiberglass and cellulose) are low.

What health effects may be associated with short-term exposures to fiberglass particles in air?

Occupational exposure to fiberglass fibers may cause skin irritation and itching because it can get into the skin. It may also cause upper respiratory tract irritation and may aggravate asthma or bronchitis. These are temporary conditions and are unlikely to occur for people in the community given the low concentrations of fibers in the air in general around the WTC disaster area.

The following are some examples of questions raised by community residents regarding environment, health, and quality of life in Lower Manhattan

I. BUILDING RELATED ISSUES

A. Landlords/Enforcement

- **How do I know my landlord had the HVAC (Heating, Ventilation and Air Conditioning) system properly cleaned?**
  This information should be on file with DEP. You can request information on whether cleanup has occurred in your building.

- **Are there written protocols as to how to clean HVAC systems?**
  ????? Only guidelines about making sure that dust is contained and that a HEPA vac be used [need to check with DEP]

- **What can I do about buildings that have not been cleaned yet (roofs, window sills, fire escapes, lobbies, hallways)? What agency enforces building cleaning?**
  ????? Call DEP and they will see if the address is in their file and whether there is any indication that the LL has cleaned [need to check with DEP]

- **My landlord had the building cleaned back in September but he has not done anything since, who can I call to make sure he continues to clean?**
  A new Fact Sheet on cleaning procedures has been issued by DOH, DEP, MOEC. This provides guidance (???) to landlords regarding continual cleaning [need to know if this is approved and ready for publication]

- **Terraces & balconies: Who is responsible for cleaning? Is it safe to clean the terrace if there is a lot of dust? What can I do if cleaned my terrace but others in my building have not and the dust blows into my apartment?**
  DEP has determined that light coating of dust can be cleaned using wet methods and/or HEPa vacuums. Large accumulations (completely covered or blanketed) of debris inside or outside should be cleaned by a certified asbestos investigator. An N-95 type dust mask is recommended for use during routine home cleaning

B. Cleaning

- **Does the Department have any recommendations about which brands of HEPAvacs + Air Purifiers provide the best safety features?**
  ?????

- **How can people who live north of Canal St. obtain a free HEPAvac and/or Air Purifier**
  At present there does not seem to be any program providing free cleaning equipment north of Canal

- **Technical questions such as: Is an Ionizer as effective as a HEPA filter? What is the difference between an Avena purifier vs. a HEPA filter?**
  ?????

- **Why are people not routinely recommended to wear a mask while cleaning?**
  [Check with ATSDR]

C. Indoor Air Testing

- **Will the Health Department conduct more indoor air testing? (will you come and test my apartment?)**

  There are no plans at present to conduct more testing of Individual apartments. [Need some rationale]

- **When will the final results of the ATSDR indoor air sampling be made available? What other substances besides asbestos and fiberglass are being analyzed?**
  ????? The results should be available____ Other substances that were analyzed include: dioxin, benzene, particulate matter (size 2.5 and 10), lead, PCBs, and chromium.

- **For how many hours did the air sampling occur in the ATSDR sampling? Don't particles and substances increase during the night hours?**

  Sampling occurred over 5-8 hours. The focus of this project was indoor sampling. Outdoor air sampling was conducted near the building to determine how similar indoor and outdoor levels were at a location. ???? Not sure if how night hours affect particles/substance levels.

- **Why is there no mention of heavy metals tested indoors?** Outdoor monitoring around the WTC worksite and indoor sampling conducted in schools near the site have not found elevated levels of heavy metals. Thus they were not considered a priority substance to be tested indoors.

- **Is lead still being tested?** Yes [need to have some data]

- **What companies conduct indoor air and dust testing?** We cannot recommend specific companies but suggest callers refer to Yellow Pages under "Environmental Consultant"

- **What standard is the Department using to determine "acceptable levels"? How do you answer the charge from others that the standards being used are not protective of health, given the unique circumstances of the WTC collapse?** In evaluating data from the WTC and the surrounding areas, the DOH is using a protective standard under AHERA (Asbestos Hazard Emergency Response Act) to evaluate the risk...

D. Air Conditioners

- **Is it safe to run air conditioners? How do you know if your air conditioner is contaminated? If there is dust settled on the outside will it enter into the air inside?**

- **How should they be cleaned?**

- **How often should filters be replaced?**

- **Can you buy a HEPA filter that will fit into an air conditioner? Some air conditioners are not compatible with HEPA filters.**

II HEALTH RELATED ISSUES

A. Health Effects

- **What is the DOH doing to protect residents' health? (Some people report that they have asthma as a result of the air, as well as other symptoms. While symptoms have decreased over the past few months, there remain concerns about coughs, upper respiratory stress, etc.)** ????Due to particulate matter and sulfur oxides, there may be temporary airway irritation. The composition of these particles may be alkaline which can result in respiratory irritation.

DOH along with several other government agencies is performing a number of tasks: monitoring air quality, assessing and mitigating risks caused by asbestos containing material. DEP is issuing and enforcing re-occupancy guidelines.

- **When will the registry be established? Will it study the health effects from environmental exposures? Will it look at all of the chemicals released like dioxin and benzene?**

- **A Mt. Sinai physician testified that he has seen patients 7 blocks from WTC with significant health effects (upper respiratory stress, asthma, etc.). What does that mean for other nearby residents downwind from the site?**

- **Do residents need to see a respiratory specialist for air exposure concerns?**

B. <u>Children</u>

- **Is it safe for children to breathe the air? Since they have smaller lungs and their bodies are still developing, do the standards for determining the health effects of toxins in the air take into account children's physical development?**

- **Different pediatricians are giving different assessments of the impact on children? What is DOH's position?**

- **In the indoor air testing why did we sample the air at adult breathing levels and not lower levels where young children breathe? (The Mt. Sinai doctor's testimony indicated that we should be more concerned about children's exposures and that we aren't doing enough)**

C. <u>Asbestos</u>

- **The indoor study found the presence of asbestos in the dust. Doesn't it take only one fiber of asbestos lodged in a lung to cause disease, and if so aren't we all at increased risk for disease?**
  Asbestos exposure becomes a health concern when high concentrations of asbestos fibers are inhaled over a long period. Illness is very unlikely to result from a single, high-level exposure, or from a short period of exposure to lower levels.

- **Don't we risk inhaling asbestos even if we wet clean and**

HEPAvac since the small fibers escape?
Again the risk of developing diseases associated with asbestos (asbestosis and cancer) depends on the level (dose) and the length of time (duration). The more asbestos that is inhaled or ingested, the greater the risk for developing disease. In this short period, the likelihood of developing disease is low.

- **Can toddlers ingest/inhale small asbestos fibers if they crawl on the rugs and floor (even though they have been cleaned)?**

D. Communication with Local Health Providers

- **Doctors are prescribing antibiotics for the WTC cough. Is this a proper treatment?**
- **What advice is the Health Department giving to local doctors?**
- **Is anyone collecting information from local doctors about the patients they are seeing?**
  DOH is currently looking into the development of a registry where this information would be collected and utilized.
- **Are there recommendations for taking supplements to off set the effects of the dust and air?**
- **Why is the DOH not recommending that local residents be tested for toxins in the blood?**

III OUTDOOR RELATED ISSUES

A. Outdoor Air Testing

- **Who is doing research on the synergistic effects of the various toxic substances together in the air?**
- **Since the only standards for assessing the impact of asbestos are for occupational exposure over 20 years, does this mean that residents of Lower Manhattan could be more at risk for a shorter period of time since many people are in the area for 24 hour periods (NOT an 8 hour day like factory workers?)**
- **How do you respond to scientists who say that the standards being used to assess health impacts of asbestos are too low?**

B. Parks

- **Are local parks and playgrounds cleaned regularly? Can there be a sign posted as to when the park was last tested and cleaned?**

- **Is soil tested for asbestos and other toxic substances?**

C. Debris Removal

- **Trucks not always wetting down and putting tarps over debris, whom should they call to complain?**

- **Why can't the material on the trucks be containerized?**

D. Barge

- **Noise complaints: banging is keeping people awake at night, who should they call to complain**

- **Dust: Debris is being dispersed through the air**

E. Streets

- **Not all streets are being wetted down, which agency can I report this to?**
  The DOS continues routine wetting-down of streets in the downtown area in order to minimize dust that may currently be generated from the WTC site. If this is not the case, contact DOS????

- **Battery Park City residents say dry sweepers are kicking up dust. There has been a change over the past several weeks and streets are no longer being wetted down.**
  ??? call DOS??

F. Sidewalks

- **What is being done to wet down sidewalks? Is this a landlord responsibility?**

- **For commercial areas who is responsible?**

G. Other Outdoor Dust Issues

- **Gardens, bushes, planters outside of buildings that have not been cleaned. Who is responsible for cleaning these?**

- **Dumpsters filled with WTC debris. Which agency should be called?**

  All trucks leaving the WTC site are required to be hosed down before leaving the site and trucks carrying debris out of the site are required to be covered. DOH should be contacted if this is not the case.

- **What happened to the dangerous chemicals (e.g. diesel) that burned in the buildings? Were they burned up or are they still seeping into the ground?**

IV OTHER ISSUES

A. Con Edison

- **When will they be finished tearing up the streets?**

- **There are placing 5 more transformers in the sub station at South St. Seaport to replace the ones destroyed at 7 World Trade Center. What are the health effects of this increase in electric power capacity? What are effects of electric magnetic fields?**

B. Homeless

- **There has been an increase in homeless population throughout Lower Manhattan after 9/11, especially in the South St. Seaport area? Is anyone doing outreach w this population?**

The following are some examples of questions raised by community residents regarding environment, health, and quality of life in Lower Manhattan

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DOH Feb 8, Press Release [NYC DOH presents findings from Indoor Air Sampling]

- When will the final results of the ATSDR indoor air sampling be made available? What other substances besides asbestos and fiberglass are being analyzed? – Spring 2002

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Victim Benefits and Assistance Contacts Matrix

Other types of assistance an organization may provide is indicated in the "Assistance Offered Box."

LOSS OF INCOME

Organization	Eligible Victims	Assistance Offered	Contact Info / How to Apply for Assistance
NY State Department of Labor (WTC Terrorist Attacks)	Individuals or their family members who lost their job or source of income as a result of the **WTC terrorist attacks.**	Provide financial assistance to individuals not covered by Unemployment Insurance who are left jobless in the wake of the terrorist attacks.	(888) 209-8124 (New York, New Jersey, Connecticut) www.labor.state.ny.us (877) 358-5306 (All Other States) www.labor.state.ny.us
U.S. Department of Labor (Pentagon Attack)	Individuals or their family members who lost their job or source of income as a result of the **Pentagon terrorist attack.**	Provides specific information about where and how to apply for unemployment assistance in the wake of the terrorist attacks.	(877) US-2JOBS (872-5627) www.servicelocator.org You may also contact your local unemployment office
U.S. Department of Labor Office of Worker's Compensation Program	Federal civilian employees, or surviving spouses, injured on duty during any of the terrorist attacks, subsequent rescue operations	Assistance with filling out forms and answering questions	(212) 337-2037 (WTC Attack) (212) 337-2663 (Fax) (202) 693-0040 (Pentagon Attack)
Advocates Office of the New York State Compensation Board	Victims, or their surviving family, who were injured and worked within the State of New York	Assistance with filling out forms and answering questions	(800) 580-6665 (718) 523-8196 (Spanish)

BUSINESS RELATED CONCERNS

Organization	Eligible Victims	Assistance Offered	Contact Info / How to Apply for Assistance
New York City Hotline	Business who located in and around the controlled area of the WTC Attack	Information & referral as well as some problem solving services	(718) 403-2220 www.newyorkbiz.com
Empire State Development Corporation	Business affected and dislocated due to the WTC attack	Information & Referral; Relocation Assistance	(800) ILOVENY (456-8369)
New York City Economic Development Corporation	Individuals & Business affected or dislocated due to the WTC attack	Provides a list of job openings and job seekers as well as assistance to access controlled areas for business.	(800) 835-7507

May 7, 2002 (11:58am)
Q and A's For WTC Comprehensive Plan

1) Does the fact that EPA is willing to clean apartments mean that you are not confident in the cleaning recommendations to use wet wipes/mops and HEPA vacs?
We remain confident the cleanup methods recommended for residents with minimal dust – wet wiping, wet moping and use of HEPA vacuums. EPA has recommended that residential areas where there was significant accumulation of dust/debris should use professional certified cleanup contractors. The Agency also recommend that all residential and commercial spaces that have been cleaned, especially those with significant impact from dust/debris from the collapse, repeat cleaning using wet mops, wet wipes and HEPA vacuums.

Porous surfaces, like carpets and drapes, may still contain some dust material that might get re-entrained in the air. Exposure occurs when the materials are in the air and inhaled, and these methods greatly reduce the chance of the substances getting into the air. EPA's pilot testing and background studies will yield more information on this in the longer term, but we do have the results of a study done by the ATSDR and the NYC Department of Health. This study tested the air inside apartments that were cleaned using the recommended methods. No air testing showed asbestos above the standard used for re-entry into schools after an asbestos removal. In a number of the apartments though, dust samples showed that some asbestos remained. This is why we say keep cleaning with these methods.

Our cleanup program is meant to give residents an added level of assurance about their homes. EPA is offering this cleanup and testing program and is also offering HEPA vacuums.

2) Isn't it too late to offer this cleaning program? Haven't people already been exposed?
No, it isn't too late. The first thing to remember is that, for most of the compounds that present a potential long-term health risk, exposure must occur at elevated levels over a long period of time. For asbestos, which is a significant concern, this is what the research says. Health effects caused by asbestos most often occur when exposure is to relatively high levels over a long period of time. Even if people have not cleaned using recommended methods, leading medical experts have concluded that the risk of getting sick from exposure to asbestos from the WTC collapse is "very, very small." According to Dr. Stephen Levin, medical director of the Mt. Sinai School of Medicine's Center for Occupational Health and Environmental Medicine, "It's not a zero increase in risk, but it's not a magnitude of risk that I think people ought to be terrorized by...."

The cleanups and testing that EPA and the city are now offering will help reduce any further exposures. In the meantime, EPA will continue to evaluate and confirm the effectiveness of cleanup techniques and whether there are compounds other than asbestos that may pose potential risk in the long term.

3)Will you clean apartments outside of Lower Manhattan? If not, why not?
This program is currently limited to lower Manhattan because the data we have indicates that the most significant impacts from debris/dust from the collapse and the fires occurred here.
For those in other areas that feel they had significant impacts, please call the hotline and provide information. We will consider the requests in light of our analysis of impacts of this tragedy.

4) When you clean apartments, will you replace or clean personal belongings, drapes, carpets or furniture?
We expect to be cleaning residential spaces that have already been cleaned and where residents have returned to their living quarters. For the most part, personal belongings will have already been cleaned at least once. The contractors will evaluate the need to clean them on a case by case basis. We will clean all hard surfaces, carpets, drapes and upholstered furnishings.
*(**Need to confirm with NYCDEP).*

5) What will you test for in the apartments you clean? Will you test for dioxin and lead and substances other than asbestos? If not, why not?
We will test for asbestos in air. This is the substance of greatest concern, and air is the pathway of exposure. By cleaning the dust, other substances will also be removed.

Our scientists will continue their current work on a list of other substances associated with the WTC collapse. The list includes asbestos, fibrous glass, dioxin, __(need list of things we are looking at)___. These scientists and technical experts are evaluating whether there is reason to be concerned about other compounds in indoor environments. If they conclude that other substances might pose a significant risk, the scientists will determine if any refinement to cleanup guidance is needed. The list and any proposed benchmarks for substances on the list will be peer reviewed by independent scientists.

6) What standard and analytical technique is EPA using to determine if homes are clean after they are cleaned or if a resident requests testing only?
EPA will use

7) Why just test the air in apartments that you clean and test? Isn't it true that dust can be settled somewhere when the tests are taken, but might be stirred up at a later time - thus potentially exposing the person to asbestos?
Asbestos is clearly the most significant substance of concern on a continuing basis. Fortunately, scientific protocols are already in place for how to conduct the testing and how to evaluate the results. Since our plan also offers ways to clean up the dust, we can remove as much as possible and offer the ongoing support of a HEPA vacuum. The test methods for accurately and consistently evaluating asbestos in dust are not in place. Scientists and technical experts are still debating these.

8) How many apartments are there in Lower Manhattan and will EPA have enough money to clean them all – if asked?
Based upon census data, New York City has informed us that they estimate 31,000 residents and approximately two residents per dwelling unit for Lower Manhattan. We are working with an estimate of 15,000 apartments. Working with FEMA, we believe we will be able to fund cleanups for all - if necessary.

10) Will you use asbestos abatement contractors and will they wear "moon suits" and respirators to do the cleaning?
For all cleanup activities, certified professional cleanup contractors will be used. For apartments that have already been cleaned, OSHA will not require workers to wear personal protective equipment. They have determined that tyvek suits and respirators are not needed. This decision is based on monitoring data collected by cleanup workers during cleaning operations in buildings close to the WTC site. If individual circumstances warrant, OSHA may exercise its authority to increase the level of personal protective equipment required.

11) How long will EPA offer this cleaning program?
Many details of the program will be worked out over the next few weeks. We expect to have the hotline running by the end of May. Residents will be asked to make their requests for cleaning and testing through the hotline over a 60 to 90 day period.

At this point, we do not know exactly how long it will take to complete the cleanups. The time frame will be determined by the number of residents requesting cleaning and testing.

12) How will you clean the apartments in the unoccupied building you chose for your pilot study of cleaning methods?
In order to recreate the ways many people cleaned their homes in Lower Manhattan, EPA will compare the effectiveness of cleaning methods ranging from those not recommended (vacuuming with an ordinary vacuum) to recommended methods (wet wipes and wet mops along with a different HEPA vacs with varying filters). The Agency will do pre- and post-testing in order to determine which methods were the most effective. We may do repeat cleaning, if necessary, as recommended to Lower Manhattan residents.

13) Will you be using micro vacuuming sample collection in your studies?
There is ongoing scientific debate about the usefulness of micro vacuum samples since there is no risk-based standard for asbestos in dust. EPA will collect samples in the unoccupied building using micro vacuuming techniques for study and screening purposes. We will also use other techniques such as wipe samples for certain compounds. *(make sure NYC and NYS are on board with this)*

14) What does EPA recommend people do with things that can't easily be cleaned, like carpets and drapes?
We do know asbestos is tough to get out of porous surfaces, such as carpets and drapes; that is why we have recommended repeated cleaning. If an apartment was heavily impacted by dust or debris from the WTC collapse, residents may want to replace porous items such as carpets and material furnishings. As part of our pilot study, we will be evaluating the effectiveness of removing asbestos as well as other compounds from porous surfaces.

15) What does EPA recommend people do with their air conditioner?
EPA is working with the state and city Departments of Health on guidelines for cleaning individual air conditioning units. The task force is also evaluating recommendations to building owners for the proper cleaning of central (HVAC) air conditioning systems.

16) When will the pilot cleaning and background studies be completed?
Studies take time. We think it will take between 18 and 24 months to complete the pilot cleaning and background studies. The study of indoor air is extremely complex. There are few indoor air standards already set. It is difficult to analyze for certain conditions indoors; there are not accepted sampling protocols. It will also take us time to get scientific support and comments on our studies. We are in the process of procuring the services of contractors who will do the cleanups, testing and the analysis of the samples. We will need to get access to residential spaces. We will need to conduct a comprehensive view of various studies and compare the results. That is why we are taking a dual approach - offering cleanups now and continuing to evaluate.

As we conduct the studies we will keep the public informed about any new information that is valuable in the short term. Any identified refinements to cleaning will be translated into recommendations, which will be widely distributed. In the meantime, we recommend continued wet wiping, wet moping and the use of HEPA vacuums.

17) Now that you are offering to pay for cleanups, will EPA or FEMA reimburse people who already had their apartments cleaned or tested?
This program will not reimburse people for prior cleanup costs. FEMA programs provided some funding for cleanups under the agency's smoke abatement and temporary relocation assistance programs. Cleanups in some apartments were covered by private insurance. For more information on funding issues, contact FEMA directly.

18) Will you clean businesses? Why should some businesses get free cleaning now?
No. FEMA's assistance generally supplements insurance, and commercial entities are not eligible for direct financial assistance. Low interest loans are available to small businesses. Commercial property owners should direct their questions to FEMA and the Small Business Administration.

The city, through this program, will be cleaning a small number of commercial spaces in the unoccupied, uncleaned buildings and will also be cleaning building roofs and facades. FEMA is supporting this program, because there is a need to expedite the work in order to prevent any re-entrainment of debris or dust from the WTC collapse. Re-entrainment could pose increased long-term health threats and slow the economic redevelopment of Lower Manhattan. The removal of the residual dust makes sense now that the recovery efforts at Ground Zero are nearly complete.

U.S. Environmental Protection Agency
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TO: Bob Avaltroni

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FROM: Kathy Callahan

OFFICE:

PHONE: (212) 637-3724

FAX:

DATE: 5/29/02

SUBJECT: WTC Asbestos Issues

Number of Pages (including cover sheet):[Enter NO. OF PAGES included] 8

Message:

Memo

To: Kathy Callahan, Director, Division of Environmental Planning and Protection
From: Mark Maddaloni, Toxicologist/Risk Coordinator MMM
Date: 2/14/02
Subject: World Trade Center (WTC) Asbestos Issues (Draft)

Contained within are Q & A's that address WTC-related asbestos issues.

1. (Use of PCM-equivalent data from Manhattan for comparison with Libby)

Issue - It has been argued that fibers less than 5 microns (um) in length may cause cancer.

Response - EPA currently utilizes the cancer potency (i.e. inhalation Slope Factor) on its consensus data base, the Integrated Risk Information System (IRIS), to determine cancer risk from asbestos. This Slope Factor is intended for use with phase contrast microscopy (PCM) fibers only (>5 um length) because the epidemiology studies that formed the basis of the dose-response assessment (i.e., Slope Factor) utilized PCM analysis. EPA recognizes, and has acted upon (as described below), the uncertainty related to asbestos risk assessment, especially the factors that contribute to its cancer potency, and is currently re-evaluating the scientific literature on asbestos. For example, EPA is preparing to peer review a scientific approach that assigns greater carcinogenic potential to extremely long fibers (>10 um), but this methodology continues use of 5 um as the minimum fiber length for carcinogenic potential. As part of this initiative, EPA has convened international workshops to evaluate the relationship between fiber dimension/mineralology and the full range (carcinogenic and non-carcinogenic) of asbestos-related health effects.

2. (Comparison of Libby and Lower Manhattan data)

Issue - Contamination exists in an air duct at 105 Duane St. which is three blocks outside EPA's defined "zone of contamination."

Response - EPA never defined either a "zone of contamination" or an exclusion zone during the response to the WTC attack. The exclusion zone definitions, which have changed over time, have been determined by the City of New York. Additionally, the City of New York has taken the

lead role on building clean-up and re-entry and has performed a follow-up investigation of asbestos contamination at 105 Duane Street.

3. (Comparison of Libby and Lower Manhattan data)

Issue - Asbestos concentration in WTC (Ground Zero Task Force Report,10/12/01) apartment dust (f/cm2) is 22 times higher than Libby interior dust samples.

Response - This statement is true in a very limited context, only. At Libby, PCM equivalent fibers in surface dust were estimated using two different methods. The Phase 2 method included only three samples (the highest value, 3,658 f/cm2, was in fact 22 times lower than the highest value 79,000 f/cm2 at WTC). However, the Phase 1 method (which included 258 samples, and is closer in approach to the methodology used at WTC) recorded a value of 22,645 f/cm2, over 6 times higher than Phase 2 results. When the total of all dust samples from Libby are compared to WTC dust samples, the maximum values differ by a factor of less than 4. It should be noted that it would be more appropriate to compare average values rather than maximum values but neither the WTC Ground Zero report or the Libby Endangerment Assessment provided this information. More importantly, the WTC-impacted apartment (45 Warren St.) was vacant and unremediated. Hence, the concentration of asbestos in dust is not representative of actual or long-term exposure.

4. (Comparison of Libby and Lower Manhattan data)

Issue - Why is EPA leaving people to their own devices in the cleanup of NYC, while intervening to clean homes at taxpayers expense in Libby because of an 'imminent and substantial endangerment to the public health'?

Response - First, the comparison of these situations has limited usefullness; the sites are not alike in many respects. In Libby, potential long-term risks are being evaluated under a "no action scenario" to support inclusion on the National Priority List (NPL). NPL listing will enable Superfund trust monies and legal authorities to be used in order to assess years of widespread asbestos contamination resulting from past mining activities. It also provides a means to evaluate remedial options that may be necessary. At WTC, EPA is part of a multi-organization team under the auspices, in a federally declared disaster, of the Federal Response Plan responding to an emergency of unforseen magnitude. Emphasis has been directed toward minimizing the environmental impact through a rapid and comprehensive remediation of WTC-related contaminants. Consequently, long-term exposures are not anticipated because the source material (building remnants and residual dust/debris) is being removed. To assess the impact of the Trade Center collapse, EPA has performed extensive ambient air monitoring for asbestos (24 hours a day, 7 days a week) throughout the WTC area. The City of New York has taken the lead to address indoor asbestos contamination and has partnered with the Agency for Toxic Substances and Disease Registry (ATSDR) to conduct a study of asbestos and other mineral fibers inside buildings. EPA has provided support for this study.

5. (Asbestos does not leave buildings with ordinary cleaning methods)

Issue - The asbestos contamination is not going to leave buildings in Manhattan by itself with ordinary cleaning any more than it will in Libby.

Response - It has been the longstanding position of EPA that all WTC related dust should be treated as potentially asbestos contaminated and should be cleaned in a professional manner by HEPA and/or wet methods. Where significant amounts of dust and/or debris exist, NYCDEP has provided guidance to property owners on building clean-up. Where there is minimal dust, NYCDOH has recommended the use of wet cleaning methods and HEPA vacuuming. In conjunction with the NYCDOH, ATSDR is conducting indoor air sampling for asbestos in WTC area residences to, among other things, evaluate the effectiveness of cleaning methods. EPA has supported this study.

6. (EPA's crude air testing cannot detect hazardous levels of asbestos)

Issue - EPA is using the Asbestos Hazard Emergency Response Act (AHERA) transmission electron microscopy (TEM) clearance test and claiming that if it shows 70 or fewer asbestos structures per mm2, then the air is safe.

Response - EPA has utilized the AHERA re-occupancy standards for schools to evaluate the ambient air in Lower Manhattan and elsewhere in New York City to provide information pertinent to long-term public health concerns, and best management practices for the debris removal operations. The AHERA standard of 70 f/mm2 is based on the background contamination of blank asbestos sampling filters. EPA has evaluated the AHERA standard in a risk context, and it meets EPA's criteria for protectiveness (less than a one-in ten thousand excess lifetime cancer risk) for a continuous one year exposure duration. This was estimated to be the reasonable maximum exposure duration for WTC-related contaminants. Also, the AHERA standard has been employed in Libby to determine residential occupancy with the understanding that additional analysis would be performed to evaluate long-term exposure.

7. (EPA's crude air testing cannot detect hazardous levels of asbestos)

Issue - Memo states that 70 f/mm2 (.02 f/cc) is the lowest level that the method (AHERA) can detect.

Response - EPA, in utilizing the AHERA standard, has employed an analytical tool (TEM) that is widely acknowledged to represent the state of the science in airborne asbestos analysis. The AHERA standard of 70 f/mm2 is the school re-entry criteria, not the detection limit. The standard is based on the background contamination of blank sample filters. In effect, the AHERA standard was intended to insure that the remediation of asbestos conataining material (ACM) in schools would be deemed complete when results of air sampling in the impacted area were statististically indistinguishable from background contamination of blank filters. The actual detection limits of TEM are a function of grid openings (i.e., filter area) analyzed and the sampling air volume. As prescribed by AHERA, the method sensitivity is .005 f/cc, not .02 f/cc.

8. (EPA's air testing violates the AHERA protocols)

Issue - EPA is violating the AHERA regulations by using the clearence test (70 f/mm2) without performing specific abatement procedures in advance of applying the 70 f/mm2 standard. Additionally, it is argued that the AHERA clearence test is intended to catch gross contamination problems only.

Response - EPA never intended to strictly adhere to the extensive AHERA regulations governing school asbestos abatement at WTC. As discussed in the previous response, the AHERA standard was utilized as a general indicator of "background" (see previous response) asbestos contamination. While the standard is not specifically applicable to measurements of outdoor air concentrations of asbestos, it was nonetheless considered a reasonable benchmark of asbestos contamination. In effect, the "indoor" clearance test for re-entry into schools was employed to inform evaluation of asbestos sampling data in ambient air around the WTC.

9. (EPA use of 1% asbestos level for cleanups will result in ineffective cleanups)

Issue - EPA and NYCDEP are claiming that only dusts over 1% or more are hazardous.

Response - EPA has stated that if a substance contains 1% or more asbestos it is considered to be an asbestos containing material. This is consistent with regulatory definitons in the National Emission Standards for Hazardous Air Pollutants (NESHAPS) and AHERA. Based upon this definition, NYCDEP has required certain remediation actions on the part of property owners. The hazard posed by asbestos contaminated bulk dust/debris is a function not only of concentration but of total mass of material, re-intrainment potential and the presence of exposed populations. EPA has taken the position that it is prudent to consider WTC related dust as potentially asbestos contaminated. For example, shortly after the disaster, EPA mobilized HEPA vacuum trucks to clean all dust/debris littered streets in the impacted area of Lower Manhattan rather than selectively cleaning streets where results from bulk sampling indicated greater than 1% asbestos.

Issue - In reference to the Libby, Montana mining site, EPA has stated that soils containing less than 1% asbestos are capable of producing airborne concentrations greater than .01 f/cc. It has been further asserted that this concentration (i.e., .01 f/cc) is over the action level for declaring a public health emergency.

Response - The relationship between asbestos concentration in settled material and ambient air is highly variable and is influenced not only by asbestos concentration but also by the total mass of asbestos contaminated material and its re-entrainment potential. Additionally, the determination of a public health emergency is based on the tenets of risk assessment which would consider numerous factors including: fiber dimension as well as concentration, exposure pathways/duration, and actual/potential populations exposed. As a result of the WTC disaster and the subsequent clean-up action, an upper bound exposure duration from WTC-related contaminants was estimated to be 1 year. Based on a 1 year exposure duration, the AHERA

standard of 70 f/mm2 (.02 f.cc) is within EPA's acceptable risk range of one-in ten thousand to one-in a million for carcinogens.

10. (There are no AHERA or other test methods for percent levels of asbestos in thin layers of settled dust)

Issue - Obtaining a percent level of asbestos is not possible when only a fine layer of settled dust is evident. Accordingly, instructions to landlords to determine if dust is greater than 1% asbestos may not be possible.

Response - This point is agreed upon; however, NYCDEP recommendations (9/26/01) advise building owners to use wet cleaning methods and HEPA filters where there is only a "light coating" (i.e, not enough to obtain percent level measurements) of dust. Also, as previously stated, EPA's position has been that all WTC-related dust should be treated as potentially asbestos contaminated.

11. (Current EPA recommendations for Manhattan will leave most asbestos)

Issue - EPA recommendations for interior clean-up, specifically the use of dry HEPA vacuums, are ineffective and unsafe.

Response - The guidance that NYCDOH has provided for carpet cleaning (combination of dry HEPA vacuum and wet methods (i.e., shampoo) is consistent with the recommendations made in a study EPA performed on this subject matter. The report, Evaluation of Three Cleaning Methods for Removing Asbestos from Carpets: Determination of Airborne Asbestos Concentrations Associated with each Method (1993), recommends: "If ACM has been released onto a carpeted area during an operation and maintenance activity or as a result of fallen surfacing material, the gross debris should be removed by a HEPA-filtered dry vacuum cleaner, followed by wet cleaning of the carpet." Additionally, the NYCDOH recommendations are consistent with the following EPA publications that provide guidance on asbestos removal from indoor environments. 1) AHERA (P. 659) states that cleaning of abated areas should be performed according to the following procedures: i) HEPA vacuum or steam clean all carpets.
ii) HEPA vacuum or wet clean all other floors and all other horizontal surfaces.
iii) Dispose of all debris, filters, mopheads and cloths in sealed, leak-tight containers.
2) Managing Asbestos in Place (OPPTS, 1990) recommends (P. 19) that the operation and maintenance of buildings with asbestos containing material should include routine cleaning of floors using wet methods and/or the use of HEPA vacuums.

12. (Disorganized clean-up resulting in re-contamination of previously cleaned areas)

Issue - Concern has been raised that the cleanup is disorganized and is resulting in cross-contamination of previously cleaned areas.

Response - EPA is not aware of significant re-contamination of cleaned areas to date. The NYCDOH, with the assistance of ATSDR and EPA, is conducting indoor dust and air sampling for asbestos in buidings impacted by the WTC disast· to evaluate the effectiveness of apartment/buiding clean-ups. The results of this study may be able to provide information to evaluate the re-contamination issue.

13. (Cleanup using AHERA is not working)

Issue - EPA is trying to use the AHERA statute as the authority for its cleanup. EPA is trying to adapt these insensitive test methods, the AHERA TEM clearance test for air, and the PLM test for % asbestos, to situations which were not intended by the regulations.

Response - EPA has not used the AHERA statute as the authority for its cleanup. The authority for EPA actions at the World Trade Center is the Stafford Act and the Federal Response Plan. The microscopy methodology (TEM) prescribed by AHERA for airborne asbestos was used because it is more sensitive than PCM and is able to distinguish asbestos from non-asbestos fibers whereas PCM can not. As previously discussed, percent mesurements of asbestos in bulk materail by PLM were intended to inform regulatory concerns rather than serve as a measure of risk. Clean-up activities by EPA were conducted as part of its mission assignment in the Federally Declared Disaster. The AHERA standard was used as a benchmark to guage public health protectiveness in an emergency response situation.

14. (PCM-equivalent correction factor)

Issue - Risk assessments for asbestosis should be based on total TEM fiber counts rather than PCM equivalents because ATSDR has reviewed studies showing that asbestosis is associated with shorter asbestos fibers.

Response - The scientific literature indicates that asbestosis (diffuse interstitial fibrosis of the lungs) is associated with chronic, high-dose exposure to asbestos. Historically, the asbestos analysis in occupational studies of highly exposed worker populations was performed by PCM, thereby providing limited information on the role of short fibers in inducing asbestosis. Mechanistically, the ability of pulmonary macrophages to clear short fibers should make them less fibrogenic than longer fibers. The ATSDR Toxicological Profile for Asbestos (2000) states, "A number of animal studies have indicated that long fibers (5 um or more) have a higher

fibrogenic activity, while short fibers have lower fibrogenic activity. This relationship may be associated with the inability of macrophages to engulf and remove fibers that are significantly larger than themselves." However, this same reference also states: "Results from human studies suggests that short asbestos fibers also may be important in causing pulmonary fibrosis. These studies showed that, in groups of chrysotile miners and millers and amosite-exposed shipyard and insulation workers with asbestosis, histologically-graded fibrosis was positively correlated with mean fiber concentration in lung tissue, but was negatively correlated with mean fiber length." More research is needed on the role of short fibers (5 um and less) in asbestosis induction. It should be noted, however, that the AHERA standard of 70 f/mm2 (which counts fibers >.5 um) is well below the asbestos concentration associated with asbestosis.

15. (Cancer risks for Libby compared to Lower Manhattan)

Issue - Risk calculations from the Libby Endangerment Assessment (12/20) are compared to risk estimates from hypothetical scenarios at the WTC.

Response - The risk calculations from the Libby Endangerment Assessment were based on actual asbestos air sampling results (analyzed by TEM) which were subsequently converted to PCME fiber counts. Risk calculations for hypothetical exposure scenarios associated with the WTC have been performed and were based on the asbestos load (f/cm2) of settled dust, rather than air samples. As previously mentioned, the relationship between asbestos concentration in settled dust and ambient air is highly variable and depends on dust re-entrainment potential and ambient conditions (e.g., air exchange rates) as well as asbestos load (f/cm2). In addition, since there was no air sampling for the WTC risk calculations, the conversion to PCME relied on limited indoor sampling data from secondary sources to arrive at a PCME estimation of 20% of total TEM fibers. The 20% value represents the upper bound of the range (1.3% - 20%) of correlations between PCME and total TEM fiber counts from the aforementioned indoor sampling data. Thousands of asbestos air samples in the ambient air collected by EPA since 9/11 indicate that PCME is less than 10% of total TEM fiber counts.

Department of Environmental Protection
Asbestos Control Program

Exterior Building Surveys Q & A

What actions have been taken to address the clean up of building exteriors since September 11, 2001?

During October and November 2001, DEP went door to door and provided copies of information for re-occupancy to building owners/managers. The information outlined actions to be taken for assessments, for appropriate clean up procedures, and provided information on reaching the DEP for assistance. The hours for providing technical assistance were expanded to provide additional guidance and staff was available to provide on site technical assistance upon request.

The DEP with assistance from representatives of the NYS DOL and US EPA performed follow-up site visits at buildings in the vicinity of the World Trade Center during late January and February 2002. The surveys included the examination of building exteriors including building roofs, facades, setbacks, and other exterior surfaces. These surveys identified locations where debris from the collapse of the WTC was still visible.

How were buildings selected for the exterior survey? What buildings were included in the exterior surveys?

All buildings in the vicinity of the WTC were included in the survey. The surveys were performed at all buildings north of Battery Place, south of Chambers Street, east of the Hudson River, and west of Pearl Street. Buildings on both sides of Beaver Street and Chambers Street were included.

What were the results of the surveys?

The surveys disclosed the presence of various amounts of debris with various dispersal patterns at the building exteriors. The majority of buildings had isolated areas of debris specifically at the perimeter of the roofs, at the base of parapet walls, and in gutters. Debris was also visible at horizontal surfaces on some of the building facades including awnings. For some buildings, building facades facing the street were cleaned while the facades at the rear remained dirty.

The observed debris was characteristic of the debris from the impact of September 11, 2001. The debris appears to have reformed into a dense mass (caked).

How many buildings were identified as requiring clean up actions?

Approximately 211 buildings were identified as requiring clean up of the roof and/ or other exterior building surfaces, and approximately 107 buildings were identified as requiring only facade clean up.

½ of the 211

Avaltroni, Robert
From: Maltais.Nancy@epamail.epa.gov
Sent: Monday, March 25, 2002 10:23 AM
To: dianac@dep.nyc.gov; avaltronir@dep.nyc.gov; ecrotty@gw.dec.state.ny.us; cxjohnso@gw.dec.state.ny.us; rjt03@health.state.ny.us; jleighto@health.nyc.gov; rcw1@cdc.gov; larry.zensinger@fema.gov; kenneth.kasprisin@fema.gov; joe.picciano@fema.gov; sbenson@oem.nyc.gov; asumowicz@cityhall.nyc.gov; patricia.clark@osha.gov; david.ippolito@osha.gov; kathy.callahan@epamail.epa.gov; mary.kruger@epamail.epa.gov; larry.reed@epamail.epa.gov
Subject: Q and A to be sent out for Dore

---- Forwarded by Nancy Maltais/R2/USEPA/US on 03/25/02 10:21 AM ----

Dore LaPosta

03/25/02 10: 17 AM

To: Nancy Maltais/R2/USEPA/US@EPA
cc:
Subject: Q and A to be sent out for Dore

Please send this out as per our conversation, (See attached file: wtcqas3 25.wpd)

Dore LaPosta
732 321-6686 phone
732 321-6616 fax

wtcqas3 25.wpd

laposta.dore@epa.gov

Questions and Answers
March 25, 10:00am

Category: testing for better cleaning methods

Q. Does the fact that you are doing a pilot cleaning project to assess cleaning methods mean that you don't think the advice given to apartment owners is sound?
EPA believes that the advice given to apartment owners is sound. In certain situations, where apartments were not very dusty, wet mops and HEPA vacs are good ways to get rid of the dust without allowing it to become airborne. For apartments with significant dust, EPA and NYCDEP recommended professional cleaning, which would also mean methods designed to prevent the dust from getting airborne. Because some residents have expressed concern about the cleanup methods recommended by the city, EPA is doing this assessment to confirm the effectiveness of the cleaning methods and, if necessary to make improvements or clarifications to existing recommendations.

Q. What cleaning methods will you try?

A. We will clean using a variety of methods, ranging from wet mops and HEPA vacs to professional level asbestos abatements. We will also test upholstery, furniture and carpets to see what cleaning techniques work on these items.

Q. Why is EPA cleaning an unoccupied building, and not a building where people are living and might be at risk?

A. EPA will chose a building that is unoccupied and has not been disturbed since September 11 because such a building will have the same conditions as many buildings did when they were inititally cleaned. By using an undisturbed building, EPA can thoroughly test a number of cleaning techniques and compare their effectiveness in a worst case scenarios.

Q. Have you chosen the building?

No. The city will provide EPA with a list of residential buildings that have not been cleaned or re-occupied since Sept. 11. The list of options is likely to be very small. Access, structural integrity, and proximity to the WTC site will be considered.

Q. When will you begin cleaning?

FEMA is working closely with the city to get the funding necessary to do the cleaning. Once the funding is in place, EPA can begin the field work.

Q. How can I volunteer my apartment to be tested?

A. The New York City's special hotline (212-221-8635) will take your requests.

Q. How do we know that what was found on the pile isn't in my apartment?

A. The dust in your apartment is similar to the dust found around the site of the World Trade Center. As EPA has stated, this dust has been found to contain asbestos, and it should be either professionally cleaned up or handled very carefully, depending on the volume of the dust in your apartment. When the buildings collapsed, they projected an enormous amount of dust and debris into the lower Manhattan area. It is likely that some dust entered most apartments within the proximity of the WTC site.

Q. How much will it cost to clean my apartment?

A. There is still uncertainty about the cost per apartment for sampling, cleaning and post-cleaning testing. **(THIS ANSWER SEEMS INCOMPLETE -- CAN FEMA HELP PAY FOR SOME CLEANUPS?HEPA VACS? Can we say that "FEMA and other relief agencies have been providing assistance in acquiring equipment if you wish to clean your own apartment and in paying some re-location costs or cleanup costs (??) if you chose professional cleaning"?)**

Q. Why are you cleaning only one building when Sen. Clinton/Rep. Nadler asked you to clean 10,000 apartments?

A. EPA's and NYC's task forces are exploring if additional cleaning recommendations need to be provided to occupied buildings and if additional testing or cleaning may be needed in some apartments. The information we gather from cleaning an unoccupied building, along with information from a NYC DOH and ATSDR indoor air study and more than 100,000 samples taken by private contractors inside buildings in lower Manhattan, will be used to determine what followup actions may be needed in some apartments.

Category: current risks -- what we know so far..

Q. Did EPA give bad guidance on indoor air?

A. EPA gave good guidance on air quality based sampling data. We acknowledged some risk, especially to workers on the pile who were directly exposed to smoke and were working in the dust. For area residents and workers we said that there ddid not appear to be a long term risk based on the levels of pollutants we were finding. This has been born out by not only our sampling – more than 15,000 samples so far – but also exptensive sampling from the NYCDEP, OSHA, and others.

Q. How can I know what risk I or my family faces?

A. We're evaluating what information we have. Given the tens of thousands of samples that have been taken by EPA and others, EPA does not anticipate any increased risk from exposure to WTC material for residents and office workers from the ambient air. We do know that the dust contains some asbestos, and we have removed the vast majority of dust from the outside -

vacuuming streets and parks and washing buildings. Removing the dust from within your apartment and from your building will reduce any risk that may exist from the indoor apartment. For the short term, we know people have experienced irritation from the WTC dust material.

Q. What are the chemicals of concern?

A. The principal concern has been asbestos, but EPA has tested for many other chemicals that were associated with the fires and with the materials we know to have been in the WTC buildings. We did not find detectable levels of many of these chemicals and for still more any levels we found were below benchmarks set by our risk assessors and public health experts. A few compounds, such as asbestos and fibrous glass along with some possible others, may still be of concern in some indoor areas.

Q. Am I at risk from mercury poisoning? A. No.

Q. Am I at risk from lead poisoning? A. No.

Q. Are levels found at school dangerous to my children?

A. According to samples taken by the Board of Education and by a private contractor, the air in downtown schools does not contain dangerous levels of pollutants. Some reported lead samples did exceed federal standards, but those levels might be related to levels commonly found in New York City. For more information, go to NYCDEP's web site – which contains all the school sampling results. You can also call the NYC Hotline.

Q. Am I at risk for asbestos disease (or sickness from glass fibers)?

A. In the long term - we do not anticipate any increased risk from exposure to WTC material for residents and office workers from the ambient air. Removing the dust from within your apartment and from your building will reduce any risk that may exist from the indoor apartment. We have continuously informed workers at the WTC site to wear respiratory protection to reduce their risks of exposure to contaminants from the site. In the short term - individuals have experienced irritation and a worsening of existing respiratory conditions due to the WTC dust.

Q. Critics like Cate Jenkins say the 1% standard isn't safe enough, will critics' comments change the standard to something else?

A. The 1% is a regulatory standard for determining if a substance is asbestos containing material. We cleaned everything up regardless of the % of asbestos in the dust. We also advised the public to just assume that the dust contained asbestos. We only used the 1% to characterize the dust and get a sense of its content.

<u>Category – long term health effects</u>

Q. Will you track health effects?

A: If you'd like to participate in a health registry call the NYC Hotline (212-221-8635) - they are taking information for a future registry.

Category: studies (UC-Davis, ATSDR)

Q. Why did EPA not test for ultrafine particles, as were tested for in the UC Davis study?

EPA has been studying ultrafines over the past several years and there is not any scientific evidence that links these ultra-fine particles – less than 1 micron in diameter – with health effects. EPA continues to look at these particles and the additional information provided by the UC Davis study will contribute to the growing body of knowledge about ultrafines.

Q. What additional work will be done on the ATSDR/DOH study? Will more apartments be tested or will you retest the ones you already tested?

A. In addition, New York City Department of Health (NYCDOH), Agency for Toxic Substances and Disease Registry (ATSDR), and EPA are planning to build on the indoor air study conducted in November and December 2001. This may include followup monitoring or recommendations for further cleaning.

Category: database

Q. What is the status of the database? Have you seen any trends yet? What sub-populations are you looking at e.g., workers in the building at the time of the impacts, cleanup workers, children living in the area?

A. EPA has developed a database that houses data from all agencies and are in the process of making this system available to the public (ARE WE?). EPA data can be obtained from or website and other agencies also have their data posted on their web sites. From our review of the data, in the long term - EPA does not anticipate any increased risk from exposure to WTC material for residents and office workers from the ambient air. Removing the dust from within your apartment and from your building will reduce any risk that may exist from the indoor apartment. We have continuously informed workers at the WTC site to wear respiratory protection to reduce their risks of exposure to contaminants from the site. In the short term - individuals have experienced irritation and a worsening of existing respiratory conditions due to the WTC dust.

Q. Who can explain what the data means?

A. EPA has professional staffers who can explain the data. If you call our Asbestos hotline or the Superfund ombudsman in Region 2, your questions can be answered. (Do we want to send people to the asbestso hotline – do they know about WTC?)

Category: miscellaneous

Q. What if my landlord won't clean my apartment?

A. Call the City's hotline and explain the situation.

Q. Who will clean the facades and rooftops?

A. NYCDEP will remove the residual debris from rooftops and facades.

Q. How many buildings will be "cleaned" of roof/facade debris?

A. The City has been studying the Lower Manhattan area; we do not yet know the perimeter of the area. The City will announce that information.

For Jane only - We have some maps indicating area probably will be south of Chambers and Frankfort Streets to Battery Park and Beaver Street, and west of Pearl Street to the Hudson River.

Q. What will is cost and when will it be done?

A. FEMA has committed $10 million for the cleaning project for facades and rooftops. The City has not yet announced when this cleanup begins.

Gilsenan, Michael (ex)

From: Lynes.Carol@epamail.epa.gov
Sent: Thursday, July 11, 2002 4:59 PM
To: dianac@dep.nyc.gov; cxjohnso@gw.dec.state.ny.us; njeffery@health.nyc.gov; jleighto@health.nyc.gov; rjt03@health.state.ny.us; nkk01@health.state.ny.us; Reed.Larry@epamail.epa.gov; grevatt.peter@epamail.epa.gov; Tulis.Dana@epamail.epa.gov; rcw1@cdc.gov; svr1@cdc.gov; marianne.jackson@fema.gov; Habib.Nina@epamail.epa.gov; Basso.Ray@epamail.epa.gov; Pavlou.George@epamail.epa.gov; Maddaloni.Mark@epamail.epa.gov; Callahan.Kathy@epamail.epa.gov; LaPosta.Dore@epamail.epa.gov; jprudhom@health.nyc.gov; michaelgi@dep.nyc.gov; kmckinne@health.nyc.gov; lilan@cityhall.nyc.gov; sbenson@oem.nyc.gov; rlc07@health.state.ny.us; sxj6@cdc.gov; axb9@cdc.gov; robert.tranter@fema.gov; Fitzpatrick.Robert@epamail.epa.gov; Kruger.Mary@epamail.epa.gov; david.ippolito@osha.gov; garvey-robert@dol.gov; Giardina.Paul@epamail.epa.gov; Girman.John@epamail.epa.gov; Smith.Terry@epamail.epa.gov; Debonis.Michael@epamail.epa.gov; jmiller@health.nyc.gov; Gibb.Herman@epamail.epa.gov; Salkie.Richard@epamail.epa.gov; Rotola.Joe@epamail.epa.gov; spryce@dcas.nyc.gov; Simon.Paul@epamail.epa.gov; 'Lynes.Carol@epamail.epa.gov'; Schaum.John@epamail.epa.gov; Mitchell.Judy-Ann@epamail.epa.gov; Yeh.Alice@epamail.epa.gov
Subject: RE: Revised Background study information sheet with corrections t o spelling.

wtc_background_sam pling_facts_...

For those who could not open the fact sheet due to a corrupt file. I removed the EPA logo. This should correct the problem (I hope).

Carol L. Lynes
EPA Region 2
212-637-3585

(See attached file: wtc_background_sampling_facts_-final7.wpd)

CALL FOR PARTICIPANTS IN WORLD TRADE CENTER STUDY TO DETERMINE PRE-9/11 POLLUTION LEVELS

The U.S. Environmental Protection Agency (EPA) needs your help in its continuing response to environmental concerns raised by the attack on the World Trade Center (WTC). To better assess the impacts of possible contamination from WTC dust, the Agency needs to learn what levels of pollution existed prior to September 11. To do that, EPA needs to test the dust and indoor air in apartment buildings that were not directly affected by the collapse.

EPA will soon begin cleaning and testing residential dwellings in lower Manhattan that were impacted by the collapse of the World Trade Center. In order to establish pre-existing or background levels of pollution, EPA will sample 28 residential units and 14 common areas within buildings located north of 59th Street.

Your building has been identified as an ideal candidate for the background study due to the building type (which is typical of housing in lower Manhattan) and its location well north of the WTC site. By volunteering to have your home sampled for pollutants, you can help fellow New Yorkers while receiving useful and interesting information about your home environment.

Background samples will be taken from two residential units and from the common areas in your building, such as the lobby, hallways and/or stairwells. Background samples are defined as samples taken from apartments and common areas that compare in layout to impacted locations near the WTC collapse. The background sampling results will be compared to data from buildings near the WTC Center collapse. The sampling for EPA's background study will be conducted by licensed contractors with direct EPA oversight.

In order to participate in the background study, EPA requests that you or your authorized representative:

- ✓ Agree to participate for a one-time, one-day, nine-hour period between on or about July 29 through August 16, 2002, from Monday through Friday (limited number of Saturdays available). EPA will schedule a time that is convenient;

- ✓ Allow small, low-suction air pumps to run continuously in your residential unit, or for building volunteers, in the common areas of the building, for a period of eight hours;

- ✓ For residences, to run fans or air conditioning units as would normally be used on a daily basis during the duration of the sampling;
- ✓ Complete a questionnaire provided by EPA;
- ✓ Allow EPA to collect and analyze wipe and vacuum samples; and
- ✓ Sign an access agreement provided by EPA.

Background samples will consist of the following:

- Air samples collected from pumps running eight-hours in each residential unit and from the common areas of the building;
- Low-suction vacuum samples from carpets, fabric furniture, and/or drapes, in each residential unit and the common areas, if available;
- Wipe samples of dust from horizontal surfaces of tables, counters, bare floors, and walls and ceilings;
- Samples from individual air conditioner units and/or from the air conditioning/heating unit for the entire building.

Sampling instruments will run for eight hours in selected common areas and residential units. EPA's contractor will stay outside the residential units or near the common areas as they are being sampled. The contractor will check the pumps hourly to ensure that they are working properly.

If you volunteer to have your home or building tested, EPA requests that you or your authorized representative be present during the sampling. For sampling in the common areas of the building, the owner or his or her authorized representative may decide whether or not to be present.

Costs for the background study are being paid by the federal government.

EPA will analyze each of the samples collected for asbestos and lead. Wipe samples will also be analyzed for dioxins, polyaromatic hydrocarbons (PAHs), silica, calcite, gypsum, man-made fibers (such as fibrous glass), and total dust. Indoor air samples will also be analyzed for silica, calcite, gypsum, and man-made fibers (such as fibrous glass). Analysis of the samples is expected to take eight to twelve weeks to complete. Once the study is complete, EPA will distribute written sampling results to the participants. The sampling results will be provided to the participants prior to publication as part of a general data base. The names of the participants will be kept confidential.

To volunteer to participate in the background study, please contact Carol Lynes at (212) 637-3585. For more information, contact Ben Barry at (212) 637-3651.

# # #

Eytan

May 7, 2002 (11:58am)
Q and A's For WTC Comprehensive Plan

1) Does the fact that EPA is willing to clean apartments mean that you are not confident in the cleaning recommendations to use wet wipes/mops and HEPA vacs?
We remain confident the cleanup methods recommended for residents with minimal dust – wet wiping, wet moping and use of HEPA vacuums. EPA has recommended that residential areas where there was significant accumulation of dust/debris should use professional certified cleanup contractors. The Agency also recommend that all residential and commercial spaces that have been cleaned, especially those with significant impact from dust/debris from the collapse, repeat cleaning using wet mops, wet wipes and HEPA vacuums.

Porous surfaces, like carpets and drapes, may still contain some dust material that might get re-entrained in the air. Exposure occurs when the materials are in the air and inhaled, and these methods greatly reduce the chance of the substances getting into the air. EPA's pilot testing and background studies will yield more information on this in the longer term, but we do have the results of a study done by the ATSDR and the NYC Department of Health. This study tested the air inside apartments that were cleaned using the recommended methods. No air testing showed asbestos above the standard used for re-entry into schools after an asbestos removal. In a number of the apartments though, dust samples showed that some asbestos remained. This is why we say keep cleaning with these methods.

Our cleanup program is meant to give residents an added level of assurance about their homes. EPA is offering this cleanup and testing program and is also offering HEPA vacuums.

2) Isn't it too late to offer this cleaning program? Haven't people already been exposed?
No, it isn't too late. The first thing to remember is that, for most of the compounds that present a potential long-term health risk, exposure must occur at elevated levels over a long period of time. For asbestos, which is a significant concern, this is what the research says. Health effects caused by asbestos most often occur when exposure is to relatively high levels over a long period of time. Even if people have not cleaned using recommended methods, leading medical experts have concluded that the risk of getting sick from exposure to asbestos from the WTC collapse is "very, very small." According to Dr. Stephen Levin, medical director of the Mt. Sinai School of Medicine's Center for Occupational Health and Environmental Medicine, "It's not a zero increase in risk, but it's not a magnitude of risk that I think people ought to be terrorized by...."

The cleanups and testing that EPA and the city are now offering will help reduce any further exposures. In the meantime, EPA will continue to evaluate and confirm the effectiveness of cleanup techniques and whether there are compounds other than asbestos that may pose potential risk in the long term.

Scope of work
Potential HVAC's Systems

3)Will you clean apartments outside of Lower Manhattan? If not, why not?
This program is currently limited to lower Manhattan because the data we have indicates that the most significant impacts from debris/dust from the collapse and the fires occurred here.
For those in other areas that feel they had significant impacts, please call the hotline and provide information. We will consider the requests in light of our analysis of impacts of this tragedy.

4) When you clean apartments, will you replace or clean personal belongings, drapes, carpets or furniture?
We expect to be cleaning residential spaces that have already been cleaned and where residents have returned to their living quarters. For the most part, personal belongings will have already been cleaned at least once. The contractors will evaluate the need to clean them on a case by case basis. We will clean all hard surfaces, carpets, drapes and upholstered furnishings.
*(**Need to confirm with NYCDEP).*

5) What will you test for in the apartments you clean? Will you test for dioxin and lead and substances other than asbestos? If not, why not?
We will test for asbestos in air. This is the substance of greatest concern, and air is the pathway of exposure. By cleaning the dust, other substances will also be removed.

Our scientists will continue their current work on a list of other substances associated with the WTC collapse. The list includes asbestos, fibrous glass, dioxin, __(need list of things we are looking at)___. These scientists and technical experts are evaluating whether there is reason to be concerned about other compounds in indoor environments. If they conclude that other substances might pose a significant risk, the scientists will determine if any refinement to cleanup guidance is needed. The list and any proposed benchmarks for substances on the list will be peer reviewed by independent scientists.

6) What standard and analytical technique is EPA using to determine if homes are clean after they are cleaned or if a resident requests testing only?
EPA will use

7) Why just test the air in apartments that you clean and test? Isn't it true that dust can be settled somewhere when the tests are taken, but might be stirred up at a later time - thus potentially exposing the person to asbestos?
Asbestos is clearly the most significant substance of concern on a continuing basis. Fortunately, scientific protocols are already in place for how to conduct the testing and how to evaluate the results. Since our plan also offers ways to clean up the dust, we can remove as much as possible and offer the ongoing support of a HEPA vacuum. The test methods for accurately and consistently evaluating asbestos in dust are not in place. Scientists and technical experts are still debating these.

8) How many apartments are there in Lower Manhattan and will EPA have enough money to clean them all – if asked?
Based upon census data, New York City has informed us that they estimate 31,000 residents and approximately two residents per dwelling unit for Lower Manhattan. We are working with an estimate of 15,000 apartments. Working with FEMA, we believe we will be able to fund cleanups for all - if necessary.

10) Will you use asbestos abatement contractors and will they wear "moon suits" and respirators to do the cleaning?
For all cleanup activities, certified professional cleanup contractors will be used. For apartments that have already been cleaned, OSHA will not require workers to wear personal protective equipment. They have determined that tyvek suits and respirators are not needed. This decision is based on monitoring data collected by cleanup workers during cleaning operations in buildings close to the WTC site. If individual circumstances warrant, OSHA may exercise its authority to increase the level of personal protective equipment required.

11) How long will EPA offer this cleaning program?
Many details of the program will be worked out over the next few weeks. We expect to have the hotline running by the end of May. Residents will be asked to make their requests for cleaning and testing through the hotline over a 60 to 90 day period.

At this point, we do not know exactly how long it will take to complete the cleanups. The time frame will be determined by the number of residents requesting cleaning and testing.

12) How will you clean the apartments in the unoccupied building you chose for your pilot study of cleaning methods?
In order to recreate the ways many people cleaned their homes in Lower Manhattan, EPA will compare the effectiveness of cleaning methods ranging from those not recommended (vacuuming with an ordinary vacuum) to recommended methods (wet wipes and wet mops along with a different HEPA vacs with varying filters). The Agency will do pre- and post-testing in order to determine which methods were the most effective. We may do repeat cleaning, if necessary, as recommended to Lower Manhattan residents.

13) Will you be using micro vacuuming sample collection in your studies?
There is ongoing scientific debate about the usefulness of micro vacuum samples since there is no risk-based standard for asbestos in dust. EPA will collect samples in the unoccupied building using micro vacuuming techniques for study and screening purposes. We will also use other techniques such as wipe samples for certain compounds. *(make sure NYC and NYS are on board with this)*

14) What does EPA recommend people do with things that can't easily be cleaned, like carpets and drapes?
We do know asbestos is tough to get out of porous surfaces, such as carpets and drapes; that is why we have recommended repeated cleaning. If an apartment was heavily impacted by dust or debris from the WTC collapse, residents may want to replace porous items such as carpets and material furnishings. As part of our pilot study, we will be evaluating the effectiveness of removing asbestos as well as other compounds from porous surfaces.

15) What does EPA recommend people do with their air conditioner?
EPA is working with the state and city Departments of Health on guidelines for cleaning individual air conditioning units. The task force is also evaluating recommendations to building owners for the proper cleaning of central (HVAC) air conditioning systems.

16) When will the pilot cleaning and background studies be completed?
Studies take time. We think it will take between 18 and 24 months to complete the pilot cleaning and background studies. The study of indoor air is extremely complex. There are few indoor air standards already set. It is difficult to analyze for certain conditions indoors; there are not accepted sampling protocols. It will also take us time to get scientific support and comments on our studies. We are in the process of procuring the services of contractors who will do the cleanups, testing and the analysis of the samples. We will need to get access to residential spaces. We will need to conduct a comprehensive view of various studies and compare the results. That is why we are taking a dual approach - offering cleanups now and continuing to evaluate.

As we conduct the studies we will keep the public informed about any new information that is valuable in the short term. Any identified refinements to cleaning will be translated into recommendations, which will be widely distributed. In the meantime, we recommend continued wet wiping, wet moping and the use of HEPA vacuums.

17) Now that you are offering to pay for cleanups, will EPA or FEMA reimburse people who already had their apartments cleaned or tested?
This program will not reimburse people for prior cleanup costs. FEMA programs provided some funding for cleanups under the agency's smoke abatement and temporary relocation assistance programs. Cleanups in some apartments were covered by private insurance. For more information on funding issues, contact FEMA directly.

18) Will you clean businesses? Why should some businesses get free cleaning now?
No. FEMA's assistance generally supplements insurance, and commercial entities are not eligible for direct financial assistance. Low interest loans are available to small businesses. Commercial property owners should direct their questions to FEMA and the Small Business Administration.