

Gilsenan, Michael

From: Smyth, Virginia
Sent: Tuesday, August 06, 2002 3:27 PM
To: 'Emily.Chacon@fema.gov'
Cc: Gilsenan, Michael
Subject: Indoor Air Timeline

FYI

Attached is a timeline we are using to move forward with the indoor air project. We should have a final scope to send to you by close of business today. The costs estimates remain the same as the most recent matrix. I am also attaching a copy of that as you requested. I am also sending over fact sheets prepared by EPA for the program. Please call when you receive these documents. I have the licensing agreements to fax to you.



Indoor Air
Timeline.xls



WTCFEM32.doc



WTCFACT1.DOC



WTCFACT2.DOC



WTCFACT3.DOC

Contract Timeline - Indoor Air

Bid Sheets Contracts e scopes or maps, require., ders	3. Bid Packages Mailed to Vendors 8/13/02 - Tues.	4. Pre-Bid Conference AM (Rem) PM (Air Mon) 8/20/02 - Tues. Meeting place to hold 75 to 100 people to be identified, depending on size of bidders list.	5. Bid Opening Sector 1 Rem & Air - AM Sector 2 Rem & Air - PM 8/26/02 - Mon.	6. Bid Opening Sector 3 Rem & Air - AM Sector 4 Rem & Air - PM 8/27/02 - Tues.	7. Commence Work 9/3/02

EPA & NYC Indoor Air Program Activities & Costs

1. Hotline

Activities	Description	Prog. Lead	Fund. Lead	Costs	Comments
Establishing Hotline	Acquire contractor services for hotline. Includes setup, management, handling calls, and distribution of materials.	EPA	NYC	\$391,500	Estimate based on 490,000 minutes of call time, and distributing materials to 3,000 callers.
Hotline Promotion	Conducting outreach efforts and developing information regarding the hotline and indoor air program. Includes printing, advertising, graphics, direct mail, and translation services	EPA	EPA	\$50,000	
Creating Hotline Database	Development of database to support hotline and to house analytical data. Compiling indoor air information received by NYCDEP to incorporate into the database. Used in program to manage information received through the hotline and website. Maintain database for data assessments, public info, report preparation	EPA	EPA	\$525,000	

Web-hosting	Establishment of mechanism for residents to contact the hotline through the Internet. Used to share time sensitive information regarding the indoor air program.	EPA	EPA	\$100,000	
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2. Monitoring & Scheduling

Activities	Description	Prog. Lead	Fund Lead	Costs	Comments
Air Monitoring Contracts (4 contracts - 1 each sector)	Scheduling of cleaning and testing by abatement contractor, collecting air samples for both post- cleaning and testing only services and common areas, collect wipe samples for metals as directed, shipping of samples for analysis, personal monitoring of abatement workers, evaluation of ventilation systems, and on-site air sampling during remediation activities.	EPA	NYC	\$13,688,000	Costs for personal monitoring
Analyzing Asbestos	Analyzing post-cleaning samples for all units, conducted by contractor services.	EPA	EPA	Estimate based on appmx. 10,500	

Samples				units being cleaned & tested and 3,000 being tested only and 3000 common spaces being cleaned \$9,075,000	
Validating Asbestos Sample Data	Validating analyses data of post- cleaning samples, conducted by contractor services.	EPA	EPA	\$1,815,000	
Analyzing Metals Samples	Analyzing wipe samples for metals pre- and post-cleaning at 5% of the units (not to exceed 50 units /quadrant for a total of 200 units) conducted by contractor services.	EPA	EPA	\$445,500	
Validating Metals Sample Data	Validating analyses data of pre- and post-cleaning samples by contractor services	EPA	EPA	\$59,400	
Analyzing Dioxins Samples	Analyzing wipe samples for dioxins pre- and post-cleaning at 5% of the units (not to exceed 50 units/quadrant for a total of 200 units) conducted by contractor services and for 50 units included in the test-only program.	EPA	EPA	\$59,400	

Validating Dioxins Samples	Validating analyses data of pre- and post-cleaning samples by contractor services and for 50 test only locations.	EPA	EPA	66,825	
Oversight by OSHA	OSHA will provide oversight to ensure worker protection	OSHA	EPA	Estimate based on 5 OSHA employees assigned to the project \$198,450	
Data/Risk Assessment	Evaluation/follow-up with the NY Academy of Medicine (NYAM). EPA data assessment activities.	EPA	EPA	NYAM travel = \$6,000	EPA's costs already represented in staff estimates. Scientific experts will be flown in from outside the region.
Support by ATSDR	ATSDR will provide technical support to the cleaning and sampling effort, primarily by participating in data review and risk assessment activities.	ATSDR	EPA	\$447,000	Funding support for ATSDR in the background study will be reduced commensurate with this funding.

3. Cleaning and Oversight

Activities	Description	Prog. Lead	Fund. Lead	Costs	Comments
Cleaning Contract (Asbestos Abatement Cleaning 4 Contracts - 1 for each sector)	Cleaning by contractor services of minimal dust accumulations under Scope A, cleaning of significant dust accumulations under Scope B, cleaning of common areas, and cleaning of ventilation systems where required.	EPA	NYC	\$49,540,000	Estimate based on 10,500 units to be cleaned, and 3,000 common areas
EPA Oversight of Cleaning and Monitoring Effort (Program Oversight by EPA)	EPA's program oversight.	EPA	EPA	EPA's salary costs = \$3,662,595 EPA's travel costs = \$607,400 TOTAL = \$4,269,995	
EPA Oversight of Cleaning and Monitoring Effort (Equipment & Supplies)	EPA needs computers, docking stations, printers, digital cameras, camcorders, tripods, phones, car rentals, personal protective equipment.	EPA	EPA	\$522,024	Equipment needed to support the unit within EPA that is implementing the indoor air program. PPE is the primary cost factor in this item (\$408,240).

needed by EPA)					
EPA Oversight of Cleaning and Monitoring Effort (Contractor Support to EPA)	Provide field support to EPA in its oversight of the monitoring and cleaning contractors. This support will assist EPA in being more responsive to concerns and inquiries raised by the public during the implementation of the program.	EPA	EPA	\$497,640	
Cleaning of Unoccupied Buildings	The exterior and interior cleaning of unoccupied buildings.	NYC	NYC	\$5,000,000	Estimate is based on the cleaning of 5 buildings at a cost of \$1,000,000 each.
Communication of Technical Environmental Issues	To provide health communication and technical assistance for lower Manhattan residents and workers related to post 9/11/01 events.	NYC DOH	NYC DOH	\$400,000	

WTC RESIDENTIAL DUST CLEANUP PROGRAM CLEANING & TESTING FACT SHEET

People living south of Canal, Allen and Pike Streets in lower Manhattan who are concerned that dust from the collapse of the World Trade Center may still be present in their residences may request assistance from EPA. Assistance offered includes the cleanup and testing of homes for airborne asbestos or testing only. The program is voluntary. While EPA will work with building owners and tenant groups to coordinate all cleaning within a building, occupants of each unit must specifically request cleanup assistance.

Cleanup work will be conducted by contractors and workers (the Cleanup Contractor) certified by New York State and New York City. Separate, third-party contractors, also licensed by New York State, will oversee the cleanup work and will conduct all testing (the Project Monitor). Further direct oversight will be provided by EPA personnel. All personnel involved in this program will carry appropriate photo identification.

The Project Monitor will contact residents requesting assistance to confirm and schedule cleanup and testing. The Project Monitor will have access to a translation service to assist with the process for those whose primary language is not English. There are three phases to the actual work: 1) Pre-cleaning inspection; 2) Cleaning, and 3) Testing.

Owners and managers of residential buildings and coop boards can request to have their building's common areas cleaned and HVAC system evaluated and cleaned, if necessary. After receiving the request, common areas such as the building lobby, hallways, stairways and elevator interiors will be cleaned. Other common areas, including laundry rooms, utility rooms, compactor rooms, and elevator shafts will be evaluated and cleaned as needed. (See separate fact sheet: Common Area and HVAC).

During a pre-cleaning inspection for an individual residence, the Project Monitor will meet with the occupant(s) to assess conditions, discuss procedures and testing options, determine any special concerns or needs, and answer questions. The Project Monitor will obtain written access and authorization, and will schedule the cleaning work. Residents will be given information about preparing for cleaning including the handling of valuable personal items, the presence of pets, etc. (See separate fact sheet: Preparing for Cleaning and Testing). The Project Monitor will discuss the level of cleanup required (see below) and resident's options for post-cleanup testing.

Damage to building as a result of the WTC collapse may have resulted in the growth of mold in apartments. As part of the Cleaning Program, the Project Monitor will contact the New York City Department of Health (NYC DOH) if mold is observed in a residence or residential building. The NYC DOH will then contact the building owner to provide recommendations on how to address the affected areas. Further information regarding mold can be found in the NYC DOH fact sheet entitled "Facts About Mold."

<http://www.ci.nyc.ny.us/html/doh/html/epi/epimold.html>

If the Project Monitor identifies the presence of potential friable asbestos type insulation in areas requested to be cleaned, this will be reported to NYCDEP for evaluation and appropriate follow up action. Likewise, if the Project Monitor identifies potential peeling, flaking or chalking paint, the NYCDOH will be notified for evaluation and appropriate followup action.

Following the assessment, the Project Monitor will determine the appropriate cleanup approach. Most residences will be addressed under EPA's "Scope A" cleanup. Residences (typically unoccupied) where there are still significant amounts of WTC dust and/or debris will be dealt with under EPA's "Scope B" cleanup which adds precautions to require further worker protection and techniques to minimize spreading of possible contamination while removing the dust/debris.

Where localized accumulations of WTC dust are found in a residence which otherwise has minimal dust (i.e., between windows, inside air conditioners), these areas will be addressed under a Scope B cleanup, wherein the areas containing the dust are isolated from the remainder of the residence prior to removal. Residents (or their representatives) may be present (but do not have to be) during Scope A cleanings but should be prepared for noise and disruption. Residents may not be present during Scope B cleanings, unless the Scope B cleanup applies to only parts of the residence. In most cases, cleaning operations should take no more than two days.

In a Scope B cleanup, the areas containing dust and/or debris are sealed off and exhaust fans equipped with HEPA filters are used to lower the air pressure within the sealed off area so that no dust escapes. Dust and debris are bagged and sealed for removal. Workers wear protective gear and residents may not be within the sealed off area. Scope B work can apply to an entire residence or to portions of a residence where remnants of bulk dust are discovered.

In a Scope A cleanup, all horizontal hard surfaces, including floors, ceilings, ledges, trims, furnishings, appliances, equipment, etc., will be HEPA vacuumed and wet wiped. Vertical and soft surfaces shall be HEPA vacuumed two times. Dry sweeping is prohibited. A detailed description of the minimum cleaning requirements is listed below. (Field experience may require modification of these procedures.):

1. Terraces, balconies, exterior window sills, window wells and window guards that are accessible from the interior of the dwelling, will be cleaned.
2. Interior windows, screens, window sills and window guards will be cleaned.
3. Vacuuming will begin with the ceiling, continue down the walls and include the floor.
4. Impermeable walls and floors will be wet wiped using disposable wipes, after consultation with and approval by owner. Wet wiping will not be conducted if it is determined that it would cause damage to the surface.
5. Curtains, fabric window treatments, upholstery and other materials that cannot be cleaned by wet wiping shall be HEPA vacuumed two times. Fabric covered

- furniture will be vacuumed using a stiff brush attachment.
6. Carpets will be cleaned with a water extraction cleaner equipped with a motorized agitator brush. Water extraction cleaning will not be conducted if it is determined that it would cause damage to the carpet.
7. Paperwork and books will be HEPA vacuumed.
8. Electrical outlets will be vacuumed.
9. Window air conditioners will be vacuumed then removed from their position and vacuumed internally. Filters will be HEPA vacuumed and reinstalled. Air conditioners will be reinstalled after cleaning.
10. Intake/discharge registers of HVAC systems (if present) will be removed/cleaned. The first foot of duct work will also be vacuumed, then the register will be reinstalled and covered with plastic.
11. Appliances such as refrigerators and stoves will be cleaned and moved. The floor footprint of the appliances will be cleaned and the appliance will be reinstalled in its original position.
12. Refrigerator cooling tubes will be brushed and vacuumed.
13. Stove exhaust fan filters will be cleaned.
14. The first foot of all exhaust duct work (including stove, dryer and bathroom vents) will be vacuumed. Exhaust fans will be vacuumed and wiped.
15. Closet floors will be vacuumed.
16. Solid objects (electrical equipment, exercise equipment, etc.) will be wet wiped, moved to allow cleaning of the underlying surface and will be returned to their original location.
17. Dishwasher toe plates will be removed and the floor beneath the appliance will be cleaned.
18. Baseboard heaters will be cleaned. Protective covers on finned radiant heaters and baseboard heaters will be removed to expose heat elements. Fins are to be brushed and vacuumed to remove dust.
19. All cleaning equipment will be vacuumed and/or wet wiped for use on the residence.

Note that cleaning clothing and accessories (handbags, shoes, etc.) is the responsibility of the resident. The Cleaning Contractor will *not* open and/or clean inside drawers, cabinets, breakfronts, and similar enclosed storage or display pieces, however, the exterior of these pieces will be cleaned.

The Project Monitor will oversee cleaning operations, and EPA staff will also visit residences to oversee work. When cleaning is completed, the Project Monitor will do a visual inspection. If dust is observed, the residence will be re-cleaned as necessary. Once the visual inspection finds the residence to be dust free, final air sampling will be authorized.

This final testing phase will take approximately eight hours and must be completed within one day (24 hours) of the completion of cleanup work. Residents have a choice between two forms

of airborne asbestos testing, modified-aggressive and aggressive. Modified-aggressive testing simulates the normal air movement you would expect in a room where a fan or air conditioner was running. In aggressive testing, a one-horsepower leaf blower is used to blast air into all corners of the residence before testing is begun. From that point on, the two tests are identical. Any air conditioners are turned on and 20-inch fans (one per 10,000 cubic feet of room space) are run at low speeds for the duration of the test. Depending on the number of rooms in a residence, from three to five air samplers are located in the residence and run for approximately eight hours. These samplers draw in a measured volume of room air and collect dust particles from the air on a filter. The collected dust is then examined in a laboratory for asbestos.

Residents may occupy their home during modified-aggressive testing but should be prepared for noise and disruption. Occupants with known allergies, asthma or other health concerns should consider contacting their health care provider to determine whether it is advisable to be present while cleaning and/or testing is underway. Residents must relocate during and for 48 hours after aggressive testing. The Red Cross has agreed to provide financial assistance to defray costs for relocation expenses. Information from the Red Cross will be provided as needed. Occupants will need to remove or secure objects, including pictures and artwork, that could be blown over or otherwise damaged.

The Project Monitor will conduct a post-cleaning inspection of the apartment with the resident at the completion of modified-aggressive sampling or upon re-entry after aggressive sampling. During this inspection the project monitor and the resident will determine whether cleaning/monitoring activities were completed and whether any property damage or loss has occurred. The resident will sign a Project Completion Form.

At a limited number of residences (approximately 250), the Project Monitor will conduct pre- and post-cleanup wipe sampling for dioxin, total metals and mercury. Results of this sampling will be shared with occupants of the individual residence tested.

EPA will notify residents and owners of the results of the post-cleanup airborne asbestos testing within one month. Residence-specific test results will not be made public.

Finally, your residence will be recleaned and retested if the post-cleanup testing finds levels of asbestos in excess of EPA's cleanup goal.

WTC RESIDENTIAL DUST CLEANUP PROGRAM COMMON AREA AND HVAC FACT SHEET

People living south of Canal, Allen and Pikes Streets in lower Manhattan who are concerned that dust from the collapse of the World Trade Center may still be present in their residences may request assistance from EPA. Assistance offered includes the evaluation and cleanup (if necessary) of the common areas and Heating, Ventilation and Air Conditioning systems (HVACs) of residential housing (*this fact sheet*) as well as the cleaning and/or testing of individual residential units (*See separate fact sheet: Cleaning & Testing*).

Cleanup work will be conducted by contractors and workers (the Cleanup Contractor) certified by New York State and New York City. Separate, third-party contractors, also licensed by New York State, will oversee the cleanup work and will conduct all testing (the Project Monitor). Further oversight will be provided by EPA personnel. All personnel involved in this program will carry appropriate photo identification.

Owners and managers of residential buildings and coop boards can request to have their building's common areas cleaned and HVAC system evaluated and cleaned, if necessary. If a tenant association makes this request, EPA will seek agreement by building owner or manager. The Agency encourages tenant associations to work to coordinate residents' requests within a given building.

After receiving the request, common areas such as the building lobby, hallways, stairways and elevator interiors will be cleaned. Other common areas including laundry rooms, utility rooms, compactor rooms, and elevator shafts will be evaluated and cleaned as needed.

Unless EPA approves otherwise (based on the circumstance of an individual building), no residential, common space or HVAC system will be cleaned until the exterior of the building has been cleaned. The New York City Department of Environmental Protection is cleaning building exteriors. EPA will then evaluate, and if necessary clean, an HVAC system upon agreement from the building owner or manager. Finally, EPA will clean residences and common spaces.

The Project Monitor will provide daily oversight of cleaning operations. EPA staff will also visit the buildings to oversee work. When cleaning is completed, the Project Monitor will do a visual inspection. If any dust is seen, the residence will be re-cleaned as necessary. Once the visual inspection finds the residence to be dust free, final air sampling will be authorized. Air samplers are run for approximately eight hours. These samplers draw in a measured volume of room air and collect dust particles from the air on a filter. The collected dust is then examined in a laboratory for asbestos.

EPA will notify building residents and owners of the results of the post-cleanup airborne asbestos testing as soon as possible. Our goal is to provide this in writing within one month.

**WTC RESIDENTIAL DUST CLEANUP PROGRAM FACT SHEET
PREPARING FOR CLEANING & TESTING**

The Project Monitor will meet with the resident(s) to assess conditions, discuss procedures and testing options, determine any special concerns or needs, and answer questions. At this time, the resident(s) will also be asked to do the following:

Provide written access and authorization and schedule a date to conduct the cleaning work.

Inform the Project Monitor of any building rules (time restrictions, appropriate entrances to the building, elevator usage, etc.) that are applicable to cleaning and/or testing.

Choose either modified-aggressive or aggressive air monitoring. Residents must plan to relocate for 48 hours from the start of air monitoring if aggressive air monitoring is selected. In addition, if your residence will be cleaned using Scope B procedures, you may also be required to relocate during the cleaning and testing process. The Red Cross has agreed to provide financial assistance to defray costs for relocation expenses. Information from the Red Cross will be provided as needed.

Make every effort to ensure the safety and security of fragile and valuable objects such as money, jewelry, silver, fine china, decorative objects and art works located in the home. Prior to the scheduled cleaning and/or testing date, valuable and/or fragile objects should be removed from the residence or secured in sealed containers for protection. Any valuable or fragile objects that cannot be moved or secured, or that require special handling, should be identified in writing and discussed with the Project Monitor prior to the start of the cleaning and/or testing in order to make provision for their safety and security. Residents must also state the estimated value of the objects listed.

Prepare a written list of items (eg., certain carpets, soft furnishings or wall coverings) that may be damaged by wet wiping or water extraction cleaning methods.

Provide for proper supervision of children to ensure they are not present in the work area.

Provide for relocation of pets from your home while the work is ongoing. Fish and pets in aquariums or terrariums need not be moved out of the home.

Notify the Project Monitor as early as possible, but no later than one business day before the scheduled date for the work in the residence, if it is necessary to cancel the appointment.

Sign the Project Completion Form upon conduct of a post cleaning and monitoring damage inspection with the Project Monitor to determine whether cleaning/monitoring activities were completed, and whether any property damage or loss has occurred.

Residents with known allergies, asthma or other respiratory health concerns should consider contacting their health care provider to determine whether it is advisable to be present while cleaning and/or testing is underway.