

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.):

- a. Terraces, balconies, exterior window sills, window wells and window guards that are accessible from the interior of the dwelling, will be cleaned.
- b. Interior windows, screens, window sills and window guards will be cleaned.
- c. Vacuuming will begin with the ceiling, continue down the walls and include the floor.
- d. 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.
- e. 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.
- f. 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.
- g. Paperwork and books will be HEPA vacuumed.
- h. Electrical outlets will be vacuumed.
- i. 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.
- j. 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.
- k. 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.
- l. Refrigerator cooling tubes will be brushed and vacuumed.
- m. Stove exhaust fan filters will be cleaned.
- n. The first foot of all exhaust duct work (including stove, dryer and bathroom vents) will be vacuumed. Exhaust fans will be vacuumed and wiped.
- o. Closet floors will be vacuumed.
- p. 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.
- q. Dishwasher toe plates will be removed and the floor beneath the appliance will be cleaned.
- r. 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.
- s. 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 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 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.