

Indoor Air Residential Assistance Program
Cleaning Contract Scope of Work
DP AFT - 7/3/02

A. Introduction

All work performed under this contract must be in compliance with all applicable, relevant, and appropriate regulations, including but not limited to those of the United States Environmental Protection Agency (EPA), the United States Department of Labor Occupational Safety and Health Administration (OSHA), the New York State Department of Labor (NYS DOL), and the New York City Department of Environmental Protection (DEP).

The USEPA and DEP will solicit participation in a direct assistance program for residents and residential building owners south of Canal Street who are concerned that their apartments may have debris/dust from the collapse of the World Trade Center (WTC). A DEP/USEPA telephone hotline has been established to receive requests from the public. The assistance will include various options, including the cleaning within apartments and common spaces by licensed asbestos contractors with follow-up asbestos sampling, asbestos air sampling only, and providing high efficiency particulate air (HEPA) vacuums.

NYS DOL licensed asbestos contractors shall perform clean up activities for residents who wish to have their homes cleaned. A third party Monitoring Contractor will schedule and monitor the work, perform a visual inspection, and perform asbestos air sampling when the clean up is completed.

The purpose of this contract is to acquire the services of a NYS DOL licensed asbestos contractor with DEP and NYS DOL certified workers for the performance of clean-up activities at residential buildings impacted by the collapse of the World Trade Center. The scope of work for the clean-up activities is attached.

B. Roles and Responsibilities

The EPA has overall responsibility for insuring that work conducted as part of the Indoor Air Residential Assistance Program is completed safely, efficiently and in compliance with the Scope of Work and all applicable rules and regulations. As such, EPA shall have the following authorities relating to work conducted under this contract:

1. The authority to stop work for health and safety reasons or for non-compliance with the Scope of Work.
2. The authority to direct the contractor in the performance of the work.
3. The authority to review and approve or disapprove of the qualifications of the contractor personnel involved in the work.
4. The right to inspect and accept or reject any work .

A third party Monitoring Contractor will perform air monitoring. Personal air monitoring will be performed on a minimum of one worker per shift per apartment during the first 4 - 6 weeks of cleaning operations. Thereafter, personal air samples will be taken randomly at a rate of one sample per quadrant per day. These results of this sampling shall be sent immediately to EPA, DEP, OSHA and the employer. The employer will make these results available to the employees or their designated representatives for their review in accordance with 29 CFR 1910.1001 and 29 CFR 1926.58.

C. Qualifications

All work shall be performed by a NYS DOL licensed contractor with NYS DOL and NYC DEP certified workers. Proof of qualifications must be presented upon request.

D. Specifications

This contract shall be in force for 18 consecutive months from the commencement date. Contractors must be prepared to mobilize within 72 hours of the contract award. Contractors shall have on staff and assigned to this contract a sufficient number of properly trained and certified workers to clean 20 units simultaneously and complete the clean up activities within each unit within 2 days. Activities shall be coordinated with the project monitor to ensure that the visual inspection is performed within two hours of the completion of clean-up activities. Cleaning activities shall be considered completed upon successful visual inspection by the Project Monitor. Copies of all invoices for work conducted under this contract shall be provided to USEPA and DEP.

The contractor shall prepare a Health and Safety Plan (HASP) in with 29CFR1910.1020 and 29 CFR 1926.58. All personnel involved in residential cleaning activities shall follow the contractor HASP prepared by their employer. EPA shall be provided with a copy of the employer HASP prior to the start of work. All cleanup operations will be conducted in accordance with either Scope A or Scope B as described below.

HEPA means a filter system capable of trapping and retaining 99.97% of all mono-dispersed particles of 0.3 micrometers in diameter.

HEPA vacuum means a vacuum cleaner equipped with a HEPA filter, with a static water lift of 95 to 100 inches of static water lift.

Scope of Work A

Application: These procedures apply to the clean-up of minimal dust accumulations (light coating). If a visual inspection indicates the presence of significant accumulations of dust and/or debris from the collapse of the WTC Scope B procedures shall applied (refer to Scope of Work B). Residents may be present during Scope A cleaning procedures.

5. Cleaning of Common Spaces

Common spaces **including hallways, stairways and elevators interiors** will be cleaned if requested by the building owner. **EPA or designee will evaluate and determine if other**

common areas including utility rooms, laundry rooms, compactor rooms require cleaning. If elevator shafts are determined to contain significant WTC dust and or debris, cleanup will proceed under the Scope B site specific work plan. Work will begin from the entrance and continue through all common spaces in an orderly fashion. **A detailed description of the minimum cleaning requirements for common space is as follows:**

- a. **Vacuuming will begin at the ceiling and continue down the walls to the floor.**
- b. **Walls will be wet wiped, after consultation with and if approved by owner.**
- c. **Impermeable floors will be damp mopped.**
- d. **Carpets will cleaned with a hot water extraction cleaner. The cleaner shall be equipped with a motorized agitator brush and have a static water lift of 95 to 110 inches.**

6. **Cleaning of HVAC Systems**

If the Project Monitor in consultation with EPA determines that an HVAC system requires cleaning, the cleaning contractor shall clean the HVAC system utilizing specialized labor trained and experienced in duct cleaning. **The HVAC cleaning will be conducted in accordance with National Air Duct Cleaners Association (NADCA) General Specification for the Cleaning of Commercial Heating, Ventilating and Air Conditioning Systems and the NADCA Assessment, Cleaning and Restoration Standard (ACR 2002).** In the event that the HVAC system for an entire building requires cleaning a separate, site specific contract will be awarded for this work. **Verification of HVAC system cleanliness will be determined by the Monitoring Contractor. If visible contaminants are evident through visual inspection those portions of the system where contaminants are visible shall be recleaned and subjected to reinspection for cleanliness.**

7. **Cleaning of Residential Spaces**

All horizontal hard surfaces shall be HEPA vacuumed and wet wiped. Vertical and soft surfaces shall be HEPA vacuumed two times. Surfaces include but are not limited to walls, floors, ceilings, ledges, trims, furnishings, appliances, equipment, etc. Encapsulating agents shall not be applied. Dry sweeping is prohibited. **Carpets will be wet vacuumed.** Cleaning of clothing and accessories (handbags, shoes etc.) shall be the responsibility of the occupant. A detailed description of the minimum cleaning requirements is as follows:

- 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 at the ceiling and continue down the walls to the floor.**
- d. **Walls will be wet wiped, after consultation with and if approved by resident.**
- 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 cleaned with a hot water extraction cleaner. The cleaner shall be equipped with a motorized agitator brush and have a static water lift of 95 to 110 inches.**
- g. **Wooden floors will be damp mopped or HEPA vacuumed (if unfinished) in consultation with resident**
- h. **Plants shall be cleaned by rinsing leaves with water.**

- i. Paperwork, books shall be HEPA vacuumed.
 - j. Electrical outlets, baseboard heating elements will be vacuumed.
 - k. 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.
 - l. 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.
 - m. 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.
 - n. Refrigerator cooling tubes will be brushed and vacuumed.
 - o. Stove storage drawers will be vacuumed if present. Stove cook tops will be opened and vacuumed. Stove exhaust fan filters will be cleaned.
 - p. The first foot of all exhaust duct work (including stove, dryer and bathroom vents) will be vacuumed. Exhaust fans will be vacuumed and wiped.
 - q. Closet interiors will be vacuumed.
 - r. 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.
 - s. Dishwashers toe plates will be removed and the floor beneath the appliance will be cleaned.
 - t. 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.
 - u. All cleaning equipment will be vacuumed and/or wet wiped for use on the residence.
8. HEPA air filtration devices (AFDs) will run continuously during all cleaning activities as appropriate given site conditions.. A standard 1200 cfm device shall be installed per 36,000 cubic feet.
 9. An adequate number of asbestos supervisors shall be present at each work place (work place is defined in Title 15, Chapter 1 RCNY as the work area and the decontamination enclosure system).
 10. A cleaning checklist (to be developed) will be completed by the supervisor at the completion of the cleaning.
 11. A thorough visual inspection will be conducted by the Project Monitor to verify the absence of visible dust accumulations. Additional clean-up procedures shall be performed where visible dust is observed.
 12. Air sampling shall be performed by the Air Sampling Technician after the area is free of dust accumulations as determined by the Project Monitor. If the apartment does not meet the cleanup criteria of 0.0009 fibers/cc (TEM) the apartment will be recleaned and retested.

13. Any damage or loss to that occurs during cleaning is the responsibility of the cleaning contractor. The cleaning contractor is not responsible for damage or loss caused by the acts of parties not involved in the cleanup.
14. All waste generated shall be treated as asbestos containing material. Transportation and disposal of generated waste shall be in compliance with all applicable rules and regulations.

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Scope of Work B

Application: A visual inspection was performed and the presence of accumulations of dust or debris (including large or significant amounts of dust or debris in residential units or portions thereof such as windows, terraces or balconies) from the collapse of the WTC was identified by EPA or designee.

Residents may be present depending on these unit specific circumstances. In cases where clean up areas can be isolated by closing doors or by the erection of containment barriers, the resident may be present in the unit. In all other applications of Scope B it is assumed that residents will not be present.

1. A site specific work plan will be prepared for review and approval by EPA prior to the start of work. This work plan will include detailed procedures for the removal of dust and debris and the cleaning.
2. An ACP-7 form asbestos project notification form shall be submitted, as required by Title 15, Chapter 1 of the RCNY, directly to the NYC DEP Asbestos Control Program prior to the start of work. NYS DOL notification shall be submitted.
3. At least one asbestos supervisor shall be present at each work place (work place is defined in Title 15, Chapter 1 RCNY as the work area and the decontamination enclosure system).
4. Personal protective equipment including disposable clothing, gloves, and respirators shall be worn during this clean-up activity.

[Did we hear from David Ippalito regarding the implications of deleting "in accordance with OSHA rules and regulations" from item 4 above?]

5. Warning signs shall be posted at the approach to the work area.
6. A worker decontamination enclosure system shall be installed at the entrance to the work area. A remote decontamination enclosure system shall be considered when appropriate i.e. inability to comply with the provision due to space limitation or other agency rules, such as for compliance with NYCFD egress requirements.
7. HVAC systems shall be shut down and locked out or isolated locally. The site specific work plan shall provide additional information on the HVAC system and proposed procedures for shutdown or isolation.
8. Isolation barriers shall be installed with two layers of 6-mil polyethylene sheeting and sealed with tape.
9. Negative pressure ventilation equipment shall be installed and operated during all clean-up activities. Equipment shall run continuously until clearance air monitoring. A minimum of one air change every 30 minutes shall be provided. When ducting to the outside is not possible, a

second negative pressure ventilation unit compatible with the primary unit capacity may be connected in series.

10. All WTC debris shall be misted and double-bagged. Accumulation of water is prohibited. Water misting shall be sufficient to wet the material without water accumulations. After the removal of debris, all surfaces shall be HEPA vacuumed and wet wiped. Encapsulating agents shall not be applied. Once all surfaces have been HEPA vacuumed and wet wiped, a second cleaning shall be performed. Surfaces include but are not limited to walls, floors, ceilings, ledges, trims appliances and equipment and furnishings.
11. If identified by the Monitoring Contractor during initial site visit, surfaces that may not be wet wiped shall be HEPA vacuumed three times or disposed as ACM waste. Disposal of residents personal property may not occur without prior authorization by EPA and the owner.
12. A cleaning checklist (to be developed) will be completed by the supervisor at the completion of the cleaning.
13. A thorough visual inspection will be conducted by the Project Monitor to verify the absence of visible dust accumulations. Additional clean-up procedures shall be performed where visible dust is observed.
14. After successful clearance air monitoring isolation barriers shall be removed in conjunction with the use of a HEPA vacuum.
15. Air sampling shall be performed by the Air Sampling Technician after the area is free of dust accumulations as determined by the Project Monitor.
16. Any damage or loss to that occurs during cleaning is the responsibility of the cleaning contractor. The cleaning contractor is not responsible for damage or loss caused by the acts of parties not involved in the cleanup.
17. All work shall be in compliance with all other applicable requirements of Title 15, Chapter 1 of the Rules of the City of New York and New York Industrial Code Rule 56. Transportation and disposal of generated waste shall be in compliance with all applicable rules and regulations.
18. If mold is observed, the cleaning contractor will contact the Monitoring Contractor who will contact the NYCDOH and EPA.