

World Trade Center Indoor Dust Cleaning Program
Cleaning Contract Scope of Work
DRAFT - 7/30/02

A. Introduction

All work performed under this contract entered into between the New York City Department of Environmental Protection (DEP) and the cleaning contractor must be in compliance with all applicable laws and regulations, including but not limited to regulations issued by 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 EPA 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 residences may have debris/dust from the collapse of the World Trade Center (WTC). A DEP/EPA telephone hotline has been established to receive requests from the public. The assistance will include various options, including cleaning within residences 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 cleaning activities for residents who wish to have their homes cleaned. An independent Monitoring Contractor will schedule and monitor the work, perform a visual inspection, and perform asbestos air sampling when the cleaning 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 cleaning activities at residential buildings impacted by the collapse of the World Trade Center. The scope of work for the cleaning activities is attached. The cleaning contractor shall supply all equipment and supplies necessary to perform the work specified in this contract.

B. Roles and Responsibilities

Under DEP's contract with the cleaning contractor, any disputes or claims related to the cleaning contract shall be submitted to DEP's Contracting Officer. DEP's Project Manager will provide overall technical oversight for the project. The EPA will provide technical assistance to ensure that the work conducted as part of the World Trade Center Indoor Dust Cleaning Program is completed safely, efficiently and in compliance with the applicable Scope of Work and all applicable laws, rules and regulations. As such, the contract between DEP and the cleaning contractor provides that EPA in coordination with the City's Contracting Officer, or his or her designee, shall have the following authority related to cleaning work conducted under this contract:

1. The authority to stop work for health and safety reasons.

2. The authority to stop work for non-compliance with the Scope of Work.
3. The authority to give technical direction to the contractor in the performance of the work.
4. The authority to review and approve or disapprove of the qualifications of the cleaning personnel involved in the work.
5. The right to inspect and accept or reject any work .

An independent 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 6 weeks of cleaning operations. Thereafter, personal air samples will be taken randomly at a rate of one sample per quadrant per day. The results of this sampling shall be sent immediately to EPA, DEP, OSHA and the cleaning contractor. The cleaning contractor shall make these results available to the employees or their designated representatives for their review in accordance with 29 CFR 1910.1020 and 29 CFR 1926.1101.

C. Qualifications

This contract requires that only a NYS DOL licensed asbestos contractor and only NYC DEP and NYS DOL certified workers will be allowed to perform any of the cleaning activities at residential buildings under this contract. This requirement also applies to any subcontractors involved in the cleaning with the exception of HVAC system cleaning contractors. Proof of qualifications must be presented upon request.

The HVAC system cleaning contractors shall be a certified members of the National Air Duct Cleaners Association (NADCA) or shall maintain membership in a nationally recognized non-profit industry organization dedicated to the cleaning of HVAC systems.

All contractors and subcontractors involved in the cleaning activities at residential buildings under this contract are responsible for completing a background check on their employees prior to employees beginning on-site work and for screening unacceptable candidates from the pool of on-site workers. Contractors are required to maintain records of background checks for 4 years and to make them available to the DEP and EPA when requested. At a minimum, the background check must include:

1. Law enforcement checks (5 years)
2. Professional license and certification

D. Specifications

This contract between DEP and the cleaning contractor shall be in force for 24 consecutive months from the commencement date. The cleaning contractor must be prepared to mobilize within 72 hours of the contract award. The contractor 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

cleaning activities in each residence within no more than 2 days. The contractor shall be prepared to work 7 days per week between the hours of 8 am and 6 pm. Activities shall be coordinated with the Monitoring Contractor to ensure that the visual inspection is performed within two hours of the completion of cleaning activities. Cleaning activities shall be considered completed upon successful visual inspection by the Monitoring Contractor. Copies of all invoices for work conducted under this contract shall be provided to EPA and DEP. Decisions regarding the reimbursement of costs will be made by DEP.

All cleaning 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.

Scope of Work A

Application: These procedures apply to the cleaning 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 be applied (refer to Scope of Work B). Residents may be present during Scope A cleaning procedures.

6. **Cleaning of Common Spaces**
Common spaces including hallways, stairways and elevator interiors will be cleaned, if requested by the building owner. The Monitoring Contractor in consultation with EPA, or EPA's 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, cleaning 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 with the ceiling, continue down the walls and include floors.
 - b. 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.
 - c. Carpets will be 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.
7. **Cleaning of HVAC Systems**
HVAC systems that are determined to be impacted by dust or debris from the collapse of the World Trade Center will be cleaned. HVAC systems cleaning, if warranted, shall be completed prior to the initiation of the cleaning of common space or residences within an

affected building. In the event that the HVAC system for an entire building requires cleaning, a separate, site specific contract will be awarded by DEP for this work. If only a portion of an HVAC system requires cleaning, then the cleaning contractor will conduct the cleaning utilizing specialized labor trained and experienced in duct cleaning. 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). Verification of the effectiveness of HVAC system cleaning will be determined by the Monitoring Contractor. If visible dust or other contaminants are evident through visual inspection or testing, those portions of the system where dust or other contaminants are present shall be recleaned and subjected to reinspection for cleanliness.

8. Cleaning of Residential Spaces

Residences will be cleaned using HEPA vacuums, hot water extraction cleaners and wet wipes as described below. Surfaces to be cleaned 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. The cleaning contractor will not clean inside drawers, cabinets, breakfronts, etagers and similar enclosed storage and display spaces. 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 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. Carpets will be cleaned with a hot water extraction cleaner after consultation with and approval by owner. The cleaner shall be equipped with a motorized agitator brush and have a static water lift of 95 to 110 inches. After cleaning, red rosin construction paper will be applied to high traffic areas to protect carpets from soiling. Hot water cleaning will not be conducted if it would cause damage to the carpet.
- f. Fabric covered furniture will be cleaned with a hot water extractions cleaner after consultation with and approval by owner. Hot water cleaning will not be conducted if it would cause damage to the furniture.
- g. Curtains, fabric window treatments, upholstery and other materials that are not cleaned by wet methods (wet wiping and hot water extraction cleaning) will be HEPA vacuumed two times. Fabric covered furniture that is not cleaned by wet methods will be vacuumed using a stiff brush attachment.
- h. 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.
- i. Window and room air conditioners will be vacuumed and removed from their housing

to allow access to internal portions of the air conditioner. The internal portions of the air conditioner and housing will then be vacuumed. Filters will be vacuumed and reinstalled. Air conditioners will be reassembled and reinstalled after cleaning.

- j. Paperwork and books will be HEPA vacuumed.
 - k. Electrical outlets will be vacuumed.
 - l. 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 their original positions.
 - m. Refrigerator cooling tubes will be brushed and vacuumed.
 - n. Stove storage drawers, will be vacuumed if present. Stove cook tops will be opened and vacuumed. Stove exhaust fan filters will be cleaned.
 - o. The first foot of all exhaust duct work (including stove, dryer and bathroom vents) will be vacuumed. Exhaust fans will be vacuumed and wiped.
 - p. Closet floors will be vacuumed.
 - q. 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.
 - r. Dishwasher toe plates will be removed and the floor beneath the appliance will be cleaned.
 - s. 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.
 - t. All cleaning equipment will be vacuumed and/or wet wiped after completion of the cleaning and before removal from the work area.
9. HEPA air filtration devices (AFDs) will run continuously during all cleaning activities, as appropriate given site conditions. One standard 1200 cubic feet per minute (CFM) device shall be installed per 36,000 cubic feet.
 10. A minimum of one asbestos supervisor shall be present in each building during work.
 11. A Cleaning Checklist (to be developed by EPA) will be completed by the cleaning contractor as tasks are completed to document the progress of the cleaning.
 12. The cleaning contractor shall notify the monitoring contractor immediately upon completion of the cleaning. The Monitoring Contractor will conduct a thorough visual inspection to verify the absence of visible dust accumulations. If dust is observed the cleaning contractor will reclean as necessary at no additional cost.
 13. Air sampling shall be performed by the Monitoring Contractor after the area is free of dust accumulations as determined by the Monitoring Contractor.
 14. Any damage or loss 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 third parties not involved in the cleaning.

15. EPA, in consultation with the owner, may identify certain furnishings (e.g. carpets and fabric covered furniture) for disposal rather than cleaning. Disposal of residents' personal property shall not occur without prior written authorization by EPA and the owner. Disposal of all wastes generated during the cleaning shall be the responsibility of the contractor. All waste generated shall be treated as asbestos-containing material (ACM). Transportation and disposal of generated waste shall be in compliance with all applicable rules and regulations.
16. If mold, suspected ACM or peeling, flaking or chalking paint is observed in the work area, the cleaning contractor shall immediately contact the Monitoring Contractor.

Scope of Work B

Application: A visual inspection was performed and large or significant accumulations of dust or debris from the collapse of the WTC was observed in common areas, residences or portions thereof (such as windows, terraces or balconies).

Residents will not be allowed in the work area. Residents may be present in the residence during cleaning in cases where the work area can be isolated by the erection of isolation barriers. In all other applications of Scope B it is assumed that residents will not be present in the residence.

1. A site specific work plan will be prepared by the cleaning contractor 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. At a minimum the procedures specified for a Scope A cleaning shall be implemented.
2. An asbestos project notification form (NYC form ACP-7) shall be submitted, as required by Title 15, Chapter 1 of the Rules of the City of New York (RCNY), directly to the NYC DEP Asbestos Control Program prior to the start of work. NYS DOL notification shall also 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 cleaning activity.
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 New York City Fire Department 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 cleaning 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 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.
11. After the removal of debris, all surfaces will be cleaned in accordance with the procedures specified in Scope A. After all surfaces have been cleaned, a second cleaning shall be performed. This results in two full cleanings of all surfaces, with the following exception. Carpets and fabric covered furniture cleaned with hot water extraction cleaners shall be cleaned only once. Surfaces include but are not limited to walls, floors, ceilings, ledges, trims, appliances, equipment and furnishings.
12. EPA, in consultation with the owner, may identify certain furnishings (e.g. carpets and fabric covered furniture) for disposal rather than cleaning. Disposal of residents' personal property shall not occur without prior written authorization by EPA and the owner. Disposal of all wastes generated during the cleaning shall be the responsibility of the contractor. All waste generated shall be treated as asbestos-containing material (ACM). Transportation and disposal of generated waste shall be in compliance with all applicable rules and regulations.
13. A Cleaning Checklist (to be developed by EPA) will be completed by the cleaning contractor as tasks are completed to document the progress of the cleaning.
14. The cleaning contractor shall notify the monitoring contractor immediately upon completion of the cleaning. The Monitoring Contractor will conduct a thorough visual inspection to verify the absence of visible dust accumulations. If dust is observed the cleaning contractor will reclean as necessary at no additional cost.
15. Air sampling shall be performed by the Air Sampling Technician after the area is free of dust accumulations as determined by the Monitoring Contractor..
16. After successful clearance air monitoring, isolation barriers shall be removed in conjunction with the use of a HEPA vacuum.
17. Any damage or loss 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 third parties not involved in the cleaning.
18. All work shall be in compliance with all other applicable requirements of Title 15, Chapter 1 of the RCNY and New York Industrial Code Rule 56.
19. If mold, suspected ACM or peeling, flaking or chalking paint is observed, the cleaning contractor shall immediately contact the Monitoring Contractor.