

**Gilsenan, Michael**

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**From:** Radhakrishnan, Krish  
**Sent:** Wednesday, February 05, 2003 4:35 PM  
**To:** 'LaPosta.Dore@epamail.epa.gov'  
**Cc:** Gilsenan, Michael; Smyth, Virginia  
**Subject:** FW: 114 Liberty Street - cleaning contract

Minor revisions to earlier draft.

-----Original Message-----

**From:** Radhakrishnan, Krish  
**Sent:** Wednesday, February 05, 2003 3:15 PM  
**To:** 'LaPosta.Dore@epamail.epa.gov'  
**Cc:** Gilsenan, Michael  
**Subject:** 114 Liberty Street

Please find the attached copy for the draft cleaning procedures for 114 Liberty Street. Please give your comments as soon as possible. Thanks for your help.



114 Liberty Scope  
Clean-up Feb...

**DRAFT 2/4/03****Asbestos Contractor – Cleaning Procedures****New York City Department of Environmental Protection  
Bureau of Environmental Compliance****Background**

A site visit at 114 Liberty Street revealed minor amounts of dust accumulation present on horizontal surfaces throughout the interior of the building. The building is currently unoccupied. The interior cleaning is to be accomplished by a licensed asbestos abatement contractor.

**Purpose**

A New York State Department of Labor (NYSDOL) licensed asbestos contractor with NYCDEP and NYSDOL certified workers shall perform the clean-up of building interiors (12 stories –5,000 to 6,000 square feet per floor). Each apartment occupies an entire floor with the exception of the top floor that is a duplex and the apartment on the third floor that shares the floor with two commercial spaces. The entire interior of the building (residential, commercial, retail spaces, common spaces, etc.) is included in this work. The building has central HVAC systems on each floor.

**Scope of Work**

- (1) All work performed shall be in compliance with all applicable, relevant, and appropriate regulations, including but not limited to those of the United States Environmental Protection Agency (USEPA), the United States Department of Labor, the New York State Department of Labor (NYSDOL), the New York State Department of Environmental Conservation, the New York City Department of Sanitation, the New York City Department of Health (NYCDOH), and the New York City Department of Environmental Protection. (NYCDEP).
- (2) An ACP-7 form, asbestos project notification form 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. USEPA and NYSDOL notification shall be submitted.
- (3) A third party air monitoring firm shall perform air sampling and provide project oversight.
- (4) The asbestos contractor shall provide sufficient equipment and experienced personnel to complete work area preparation and cleaning activities of the building interiors within three (3) weeks. Water/electrical supply shall be provided by residents/owner. At least one asbestos supervisor shall be present per work area during the duration of the clean-up activities. Work shall be performed 24 hours per day, seven (7) days per week.
- (5) Personal protective equipment including disposable clothing, gloves, and respirators shall be worn during this clean-up activity.
- (6) Warning signs shall be posted at the approach to each work area.
- (7) A separate worker and waste decontamination enclosure system in compliance with Title 15, Chapter 1 of the RCNY shall be installed at the entrance to each work area. More than one work

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area may be established. Work shall proceed from the 12<sup>th</sup> floor down to the first floor. The use of a remote decontamination enclosure system is acceptable. Prior approval must be received from the NYCDEP for decontamination enclosure system placement and phasing of clean-up activities, if required.

- (8) An entry/exit log in compliance with the requirements set forth in Title 15, Chapter 1 of the RCNY shall be maintained in the clean room. The site supervisor shall maintain an activity log.
- (9) Initially, the interior of the elevator shaft, including the top of the elevator car and the elevator pit, shall be HEPA vacuumed and wet wiped to allow for the use of the elevator during the clean up. Once the clean up throughout the building is complete, the elevator shaft, including the top of the elevator car and the elevator pit, shall be re-cleaned prior to clearance air monitoring.
- (10) Isolation barrier locations (i.e.: wall or ceiling penetrations, windows, vents, doors, etc.) shall be HEPA vacuumed and wet wiped prior to installing two-layers of 6-mil polyethylene sheeting and sealed with tape. Window wells, ledges, guards, etc., that are accessible from the interior shall be cleaned.
- (11) Negative pressure ventilation equipment (air filtration devices –AFDs) shall be installed and operated continuously 24 hours per day during all clean-up activities. Equipment shall run continuously until clearance air monitoring. A minimum of one air change every 15 minutes shall be provided. When ducting to the outside is not possible, a second negative air unit compatible with the primary unit may be connected in series.
- (12) Dropped ceilings at functional air plenums shall be removed. Interior and perimeter walls shall be removed to access the interstitial spaces for cleaning. Only one side of each wall shall be removed to access the space. The back of walls scheduled to remain (i.e. tiled bathroom walls) shall be wet wiped and HEPA-vacuumed. For specific information regarding the location of walls to be removed, please refer to the plans.
- (13) The HVAC Systems and associated ductwork shall be removed and disposed in accordance with applicable rules and regulations.
- (14) All debris and/or dust shall be misted and double bagged. Accumulation of water is prohibited. Water misting shall be sufficient to wet the material without water accumulations. Caution shall be taken to avoid wetting items that may be damaged by wet methods. An encapsulating agent shall not be applied. Fallen pieces of fireproofing shall be wetted and bagged directly.
- (15) All surfaces shall be wet wiped and HEPA vacuumed. Once the initial cleaning is performed, and all surfaces are dry, a second cleaning shall be performed. Surfaces include but are not limited to walls, floors, ceilings, ledges, windowsills, trims, appliances, equipment, personal items, and furnishings. Fireproofing and insulation shall be HEPA-vacuumed only. Care shall be taken to minimize the disturbance of the fireproofing and insulation. The fireproofing is not ACM according to the information provided to the DEP.
- (16) Surfaces that may not be wet wiped shall be HEPA vacuumed three times or disposed as ACM waste. Disposal of material may not occur without prior authorization by the building owner and/or resident, as applicable. Items identified by residents for cleaning that cannot be cleaned shall be

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immediately brought to the attention of DEP. DEP will provide a determination. Any agreement to dispose the item(s) must be received in writing from the owner and/or resident as applicable.

- (17) Resident and/or owner, as applicable, must identify items to be cleaned or disposed. Tags shall be placed on items to be disposed. The contractor shall dispose tagged items unless otherwise indicated in this scope of work. Special conditions or handling instructions may also be specified within units. These include items/locations not to be incorporated in this scope of work. Residents shall provide written notice of special instructions and items not to be handled with their authorizations.
- a) Residents and/or owner shall identify items for disposal with clearly legible tags. Residents and/or owner, as applicable, shall make the final decision on cleaning or disposal of items. Items shall be cleaned by wet wiping and/or HEPA-vacuuming procedures, as appropriate. Compressed dry air (low pressure) may be used to blow debris/dust from openings/crevices in the items. HEPA vacuuming must be preformed in conjunction with this procedure. Care must be taken not to damage the items. Residents shall provide a written listing of items.
  - b) Items identified for disposal (tagged) shall be double-wrapped in 6-mil polyethylene sheeting and labeled as ACM waste or bagged in labeled ACM waste bags. The cleaning of items to be disposed is not required. In lieu of disposal as ACM waste, larger items may be cleaned and disposed as non-regulated waste with prior approval by the Department.
  - c) Built-in items shall be disassembled, removed, and stored in a central location prior to the initiation of this contract by the resident/owner. The components of the built-in cabinets shall be wet wiped, HEPA vacuumed, and stored within each unit in a designated staging area for these items. The contractor shall not be responsible for removing or disassembling other built-in items that may be present. Built-in items shall be cleaned in place using wet wiping and HEPA vacuuming techniques.
  - d) Kitchen stoves, refrigerators, dishwashers, etc. shall be wet wiped and HEPA vacuumed, and shall remain in the units. The surfaces beneath the appliances shall be cleaned in causing damage to cabinets or appliances.
- (18) All equipment used for cleaning activities shall be vacuumed and/or wet wiped prior to removal from the work area.
- (19) The project monitor shall perform a thorough visual inspection to verify the absence of visual dust accumulations. Additional clean-up procedures shall be performed where visible dust is observed.
- (20) Upon successful visual inspection, the work area shall be isolated from the remainder of the work site pending clearance monitoring. Clearance monitoring shall be performed after completion of all clean up activities at the work site.
- (21) The Technician(s) shall perform clearance sampling after the area is free of dust accumulations as determined by the Project Monitor. The apartment will be re-cleaned and retested if the clearance criteria are not achieved. The Contractor is responsible for the costs of re-cleaning associated with

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failure to meet the clearance criteria. The clearance air monitoring criteria have been established by the USEPA for this clean up activity (WTC Vicinity). The clearance criteria are as follows:

|                             |                         |                           |
|-----------------------------|-------------------------|---------------------------|
| ▪ asbestos in air           | 0.0009 f/cc PCMe        | Primary clearance level   |
| ▪ lead in settled dust      | <25 µg/ft <sup>2</sup>  | Primary clearance level   |
| ▪ dioxin in settled dust    | <4 ng/m <sup>2</sup>    | Primary clearance level   |
| ▪ fibrous glass in air      | <0.01 f/cc              | Secondary clearance level |
| ▪ crystalline silica in air | 0.5 µg/m <sup>3</sup>   | Secondary clearance level |
| ▪ PAHs in settled dust      | <0.15 mg/m <sup>2</sup> | Secondary clearance level |

- (22) After successful clearance monitoring, isolation barriers shall be removed in accordance with the applicable requirements of Title 15, Chapter 1 of the RCNY.
- (23) The cleaning contractor is not responsible for damage or loss caused by the acts of parties not involved with the cleanup. Resident shall be responsible for the removal of any valuables. If such removal is not feasible, the resident shall notify the Project Monitor in writing (including original receipt, formal appraisal, or estimated value) as to the location, description and value of said item.
- (24) 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) with the exception of items that can be cleaned prior to disposal. As specified above, large items may be cleaned and disposed as non-regulated waste with prior authorization by the Department. Transportation and disposal of generated waste shall be in compliance with all applicable rules and regulations.
- (25) All work shall be in compliance with all other applicable requirements of Title 15, Chapter 1 of the RCNY.
- (26) The following table contains special conditions and handling instructions for items in specific units. Items not specifically referenced in this table shall be handled in accordance with the procedures specified in this scope of work and in written documentation provided by residents via DEP.

| <b>Floor No.</b> | <b>Action Item / Notables</b>                                                                                |
|------------------|--------------------------------------------------------------------------------------------------------------|
| 5 <sup>th</sup>  | A partition/ barrier shall be installed at the damaged north wall.                                           |
| 4 <sup>th</sup>  | A partition/ barrier shall be installed at the damaged north wall and ceiling.                               |
| 3 <sup>rd</sup>  | Commercial space: The HVAC system, associated ductwork and suspended ceiling shall be removed and discarded. |
| 1 <sup>st</sup>  | The HVAC system and associated ductwork, and stove exhaust ducts shall be removed and discarded.             |

- (27) Time sheets shall be submitted to DEP on a weekly basis.
- (28) At the completion of work a final report shall be submitted to DEP. The final report shall include copies of the daily logs (activities and entry/exit logs), waste manifests, etc.