

DRAFT

ASBESTOS PROJECT MONITOR AND AIR SAMPLING CONTRACT**A. Introduction**

All work performed under this contract must be in compliance with all applicable, relevant, and appropriate regulations and Scope of Work, including but not limited to those of the United States Environmental Protection Agency (USEPA), the United States Department of Labor, Occupational Safety and Health Administration (OSHA), the New York State Department of Labor (NYSDOL), the New York State Department of Health Environmental Laboratory Approval Program (ELAP) and the New York City Department of Environmental Protection (NYCDEP). This project shall involve coordinating and monitoring the clean up of debris and air sampling from building apartments in the vicinity of the World Trade Center explosion site.

B. Qualifications***Project Monitors***

The Project Monitors must possess valid NYS Asbestos Project Monitor certificates. Monitors must have served as a third party project monitor on at least 20 asbestos abatement projects. Project Monitor must have performed final clearance inspections on at least 50 asbestos abatement projects.

Technicians

Air monitoring technicians must possess valid NYS Asbestos Project Sampling Technician (APST) certificates. Technicians must have performed air sampling for at least 6 months.

Proof of qualifications must be presented upon request.

Equipment

Sampling equipment must be in sufficient quantity to provide the amount and type of samples required for this project. At a minimum the following equipment are required: air-sampling pumps with flow rate capacities of 2 to 10 liters per minute, tripods, rotometers, sample cassettes with mixed cellulose ester filters having pore size of 0.45um(TEM).

C. Specifications

Clean up activities shall be scheduled for 20 to 30 units per day. Air sampling shall also be provided at 10 to 20 units where clean up activities are not scheduled. Sufficient personnel shall be available for project monitoring and sampling.

The Project Monitor shall direct and coordinate all services and report all findings to USEPA. The scope of this project will be as follows:

1. The Project Monitors shall be responsible for receiving information from the EPA Hotline, scheduling cleaning-up activities and air sampling with the tenants/owners, asbestos abatement contractors and air monitoring technicians to the various apartments.

2. Air monitoring technicians must be on-site during clean-up activities to collect final clearance samples.
3. The Project Monitor shall ensure that the clean up activities comply with the NYCDEP Scope of Work.

Post Clean-up Air Sampling Procedure must be as followed:

- a) Sampling shall not begin until a visual inspection confirms the absence of visible debris.
 - b) All surfaces must be completely dry prior to the start of sampling.
 - c) Sampling equipment shall be placed at representative locations within the work area and away from obstructions. The sampling cassette must be placed on a tripod and not taped to existing surfaces.
 - d) Air conditioning units where applicable shall be run/operated at least 15 minutes prior to the start of sampling. The air conditioning units shall operate continuously throughout the sampling. HVAC systems shall be in operation during sampling.
 - e) Forced air equipment (e.g. leaf blowers) may be used only after written authorization by the occupant or his/her authorized representative. The project manager shall advise the occupant or his/her authorized representative on the advantages and disadvantages regarding the use of the equipment and obtain the individual's signature authorizing use. Before the start of sampling, forced air equipment (such as a 1 horsepower leaf blower) may be used to direct exhaust air against walls, ceilings, floor, ledges and other surfaces. When directing the exhaust, caution shall be taken to minimize disturbance and potential damage to furnishings and personal belongings.
 - f) One 20-inch fan shall be installed per 10,000 cubic feet of room space and run at low speed. The fan shall operate continuously throughout sampling and shall not be turned off until sampling is completed.
 - g) For studio apartments 3 samples shall be collected. For 1-bedroom apartments and above 5 samples shall be collected. Technicians shall collect a volume of 3000 liters per sample using a flow rate of 10 liters per minute.
 - h) Samples must be labeled and accompanied with completed chain of custody forms before shipping to the designated laboratory.
 - i) Project Monitor shall perform all final visual inspections.
 - j) All information must be maintained on a data based software program that is acceptable to the USEPA.
1. Project reports, including a project completion sign-off signed by the project monitor and the occupant or his/her authorized representative, must be typed and forwarded to USEPA with a copy to NYCDEP.

Indoor Clean-up Activities

Scope of Work A

Application: These procedures apply to the clean-up of minimal dust accumulations (light coating). Cleaning shall include HEPA- vacuuming and wet-wiping. If a visual inspection indicates the presence of large debris accumulations from the collapse of the WTC, then these procedures shall not be applicable (refer to Scope of Work B). The USEPA coordinator must be contacted immediately with information regarding the presence of debris. The contractor shall not proceed with work until the USEPA coordinator provides a determination regarding appropriate procedures.

1. All work shall be performed by a NYS DOL licensed contractor with NYS DOL- and NYC DEP- certified workers. The clean-up activities must be performed in the presence of an authorized individual/occupant who shall be responsible for personal belongings.
2. A third party air monitoring firm shall perform air sampling after the clean up activities. The person who conducts sampling shall possess a valid NYS DOL certificate.
3. Individuals performing clean up activities are not required to wear personal protective equipment or respirators.
4. All surfaces shall be wet wiped/HEPA vacuumed. An encapsulating agent shall not be applied. Surfaces include but are not limited to walls, floors, ceilings, ledges, trims, furnishings, appliances, equipment, etc.

Carpets, curtains, upholstery, and other materials that cannot be cleaned by wet wiping shall be HEPA vacuumed two times. Dry sweeping is prohibited. Plants shall be cleaned by rinsing leaves with water. Paperwork and books shall be HEPA vacuumed. Clothing and accessories shall be the responsibility of the occupant.

The exterior of air condition units shall be wet wiped/HEPA vacuumed. The air condition units shall then be pulled into the interior space where the grills and unit shall be HEPA vacuumed and wet wiped.

5. A thorough visual inspection shall verify the absence of visible dust accumulations. Additional clean-up procedures shall be performed where visible dust is observed. Air sampling shall be performed after the area is free of dust accumulations.
6. Personal air monitoring shall be performed in accordance with USDOL OSHA requirements. In addition, personal air monitoring shall be performed on a minimum of one worker per shift during the clean up activities for the first ten (10) units. There after at least one personal sample shall be taken on employees cleaning every other unit. The results of this sampling shall be shared immediately with OSHA, the employer and the workers or their representatives. These results shall be also submitted to the USEPA for review and shall include at a minimum the date and hours of sampling, name of the worker, his/her NYCDEP

ONE
HEPA
AIR SAMPLE
PER UNIT

PCM

asbestos certification number, and specific description of activities in the unit during the sampling.

Indoor Clean-up Activities

Scope of Work B

Application: A visual inspection was performed and visible accumulations of debris from the collapse of the WTC was identified. The USEPA coordinator must be contacted immediately with information regarding the presence of debris. The contractor shall not proceed with work until the USEPA coordinator provides a determination regarding appropriate procedures. This scope of work consists of generic procedures to be followed. Clean-up of visible accumulations of debris will require the submittal of a site specific scope of work. If debris is not present, refer to Scope of Work A.

1. All work shall be performed by a NYSDOL licensed contractor with NYSDOL- and NYC DEP- certified workers.
2. An ACP-7 form asbestos project notification form shall be submitted directly to the NYCDEP Asbestos Control Program prior to the start of work. NYS DOL notification shall be submitted.
3. A third party air monitoring firm shall perform air sampling. The person who conducts sampling shall possess a valid NYS DOL certificate. These results shall be sent immediately to OSHA, the employer and made available to the employees or their designated representatives for their review in accordance with 29CFR1910.1020.
4. At least one asbestos supervisor shall be present at each work place (work place is defined in Title 14, Chapter 1 RCNY as the work area and the decontamination enclosure system).
5. Personal protective equipment including disposable clothing, gloves, and respirators shall be worn during this clean-up activity in accordance with OSHA rules and regulations.
6. Warning signs shall be posted at the approach to the work area.
7. 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.
8. HVAC systems shall be shut down and locked out or isolated locally.
9. Isolation barriers shall be installed with two layers of 6-mil polyethylene sheeting and sealed with tape.

10. Negative pressure ventilation equipment shall be installed for 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.
11. All debris shall be misted and bagged directly. Accumulation of water is prohibited. Water misting shall be sufficient to wet the material without water accumulations. After the removal of debris accumulations all surfaces shall be wet wiped and HEPA vacuumed. An encapsulating agent shall not be applied. Once all surfaces have been wet wiped and HEPA vacuumed a second cleaning shall be performed. Surfaces include but are not limited to walls, floors, ceilings, ledges, trims and furnishings.

Surfaces that may not be 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 space occupant.
12. A thorough visual inspection shall verify the absence of visible dust accumulations.
13. After successful clearance air monitoring isolation barriers shall be removed in conjunction with the use of a HEPA vacuum.
14. 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.

Indoor air draft2.doc 5/14/02