

**New York City Department of Environmental Protection
Bureau of Environmental Compliance**

Consultant – Air Monitoring Requirements

Background

A follow-up visit to 114 Liberty Street revealed dust accumulations present on surfaces within the interior of the building. The interior cleaning is to be accomplished by a licensed asbestos abatement contractor.

Purpose

The consultant shall provide personnel experienced and certified in asbestos air monitoring to be on-site, full-time, during work area preparation and cleaning phases of building interiors (12 stories approximately 55,000 square feet in total). The air monitor(s) will observe the work, conduct air monitoring for analysis via Transmission Electron Microscopy (TEM) and monitor that the cleanup of the building interiors is being performed consistent with the project specifications and appropriate regulatory requirements. Work shall be performed 24 hours per day, seven (7) days per week

Air Monitoring/Construction Inspection Services

Air monitoring by an independent third party consultant shall be conducted during all cleanup activities. The air monitoring consultant shall provide individuals certified as project monitors and air sampling technicians to perform daily air sampling and inspections from the commencement of the project through to final air clearance sampling. The air monitoring consultant shall provide sufficient equipment and experienced personnel to monitor work area preparation and cleaning phases of the building interiors.

Qualifications

Project Monitoring

The Project Monitors must possess valid NYS Asbestos Project Monitor certificates. Monitors must have served as a third party project monitor on at least 25 asbestos abatement projects. Project Monitor must have performed final clearance inspections on at least 25 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 0.45µm(TEM).

Specifications

It is anticipated that the work will be completed within three (3) weeks.

Air Sampling Analysis

All air samples shall be analyzed via TEM. The method of analysis and sampling methodologies shall be governed by New York City Department of Environmental Protection (NYCDEP) Title 15 and New York State Industrial Code Rule 56 (NYSICR 56). A turnaround time of 24 hours is required for all samples.

Air Monitoring

1. A minimum of five (5) samples per day is required during cleanup activities.
2. Samples shall be collected at isolation barriers outside the work area, the clean room of the worker/waste decontamination facility, and outside of the building.
3. Sample collection shall be in accordance with Title 15, Chapter 1 of the Rules of the City of New York (RCNY) and New York State Industrial Code Rule 56 regarding sample locations, rate of flow, and required volumes to achieve the necessary analytical sensitivity.
4. Sampling equipment shall be placed at representative locations and away from obstruction. Sampling cassette must be placed on a tripod and not taped to existing surfaces. All air sampling equipment shall be pre- and post- calibrated to insure accurate air sampling volumes.
5. The Air Sampling Technician shall perform clearance air sampling in accordance with Title 15, Chapter 1 of the RCNY after the areas are free of dust accumulations as determined by the Project Monitor. All surfaces must be completely dry prior to the start of sampling. Clearance air sampling shall be performed at each unit. A minimum 5 samples shall be collected on each floor. The elevator shaft and first floor commercial spaces shall be cleared separately. Clearance air monitoring shall be performed after the completion of all clean up activities at the work site.
6. The apartment will be re-cleaned and retested if the clean-up criterion of 70 structures/square millimeter (70 s/mm² measured by TEM) is not achieved. This clean-up criterion may be reevaluated and revised, if determined necessary based on field conditions and analytical limitations.

Project Monitoring

*Air Monitoring Requirements
For
114 Liberty Street*

1. The project monitor shall provide oversight of clean-up activities to ensure compliance with project specifications, tenants authorizations, and applicable rules and regulations. The project monitor shall be present on site during all cleaning activities. The project monitor shall coordinate all scheduling requirements for timely completion of the work (completion of work area preparation and cleaning activities within three (3) weeks. The project monitor shall maintain the inventory of valuable items in each unit as provided by tenants. A copy of the contractor requirements is attached. For additional and specific tasks, refer to this attachment.
2. The project monitor shall provide daily monitoring of all work activities to insure compliance with the scope-of-work, the applicable rules and regulations, and the contracts. This includes but is not limited to the verification of worker certification status, the use of proper engineering controls and appropriate work practices.
3. The project monitor shall direct corrective actions when appropriate and shall be responsible to stop work until corrections are made. Findings must be reported immediately to DEP via telephone call. Written notification of observation and corrective actions must be received by the DEP within 48 hours of telephone call.
4. A final report shall be submitted to the DEP within days of project completion. The report shall clearly identify the work performed in each unit and shall include all laboratory reports, chain-of-custody forms, field notes, copies of employee credentials (i.e. certificates), tenant and owner authorizations, etc.