



Program Directive: 1D-9 Monitoring Removal of Asbestos and Hazardous Materials during Construction

Responsible Office: Design & Construction

Last Revised Date: May 2019

Summary:

This Directive describes the requirements of monitoring the removal and disposal of hazardous materials (asbestos, hazardous waste, universal waste and other construction waste where the Campus is classified as the generator of the waste) during construction of Fund Projects.

Overview:

This Directive describes how and when the Consultant provides staff and other services required for monitoring the removal and disposal of hazardous materials (asbestos, hazardous waste, universal waste, etc.) and other construction waste owned by the Campus as the generator of the waste.

This Directive addresses the qualifications of the Project Monitor (Monitor) and the services provided by the Monitor during the Project. The Monitor is an independent third party firm who assumes a duty to act in good faith and with care on behalf of the Campus and the Fund. The Monitor must be familiar with all state and federal regulations, rules and recommendations and Campus policies and procedures for the disposal of hazardous materials (asbestos, hazardous waste, universal waste and other construction waste.)

For related requirements, see Directives 1D-5 Lead Remediation and 1D-6 Asbestos Abatement.

Responsibility:

The Consultant provides the registered design professional who provides the contract documents, including the drawings, specifications, and other information required to perform the construction work. The Contractor performs the construction work shown in the contract documents, including the removal, collection, separation, containment, appropriate labeling and other work with hazardous materials (asbestos, hazardous waste, universal waste and other construction waste.) The Campus is the generator of the waste. The Monitor observes and documents compliance with state and federal waste regulations, rules and recommendations, and Campus policies and procedures during design and construction of the Project, including work performed by the Contractor and all Sub-Contractors. The Monitor shall work with the Contractor to immediately correct any deficiencies noted with the hazardous materials handling and disposal during the Project and shall also inform the Campus Project Manager of any such deficiencies.

Procedures

I. Design Phase

- a. In the Project scope of work or program, or at the orientation meeting, the Campus determines the type of waste (asbestos, hazardous waste, universal waste and/or other construction waste) that will be generated and therefore, monitored.
- b. The Campus makes available all existing information previously obtained during Campus planning and in the construction of other projects on or near the project site. The Consultant reviews the Campus information, evaluates its reliability and applicability to the project, and provides recommendations for the acquisition of additional information and data. Refer to Directive 1A-2 Program Verification Phase.
- c. The Consultant prepares a sampling and testing plan designed to acquire the appropriate additional data at a reasonable cost. The plan provides the data needed by the Consultant to provide construction documents that show and describe the extent of, hazardous materials (asbestos, hazardous waste universal waste and other construction waste) that

will be monitored. The Consultant obtains and negotiates cost proposals in accordance with directive 1C-4 Extra Compensation Authorization.

- d. In the Schematic and Design Manual Phase submissions, the Consultant provides the appropriate documents that show and describe the extent of demolition, removal and/or abatement of hazardous materials (asbestos, hazardous waste, universal waste and other construction waste.) The cost estimate for each Phase is based on the extent of removals shown.
- e. In the PreBid submission, the Consultant provides contract documents that show and describe the complete extent and type of demolition, removal and/or abatement of hazardous materials (asbestos, hazardous waste, universal waste and other construction demolition waste.) The contract documents also provide the construction waste management plan per Section 01 74 19 Construction Waste Management, and other project specific documentation. See Directives 1D-6 Asbestos Abatement and 1D-5 Lead Remediation for additional requirements.
- f. Review the PreBid submission with the Campus Hazardous Waste Specialist (Specialist) and the Campus Project Manager. Review the proposed design in detail and confirm that their previously expressed preferences and comments have been properly considered. Modify the drawings and specifications for the Project to comply with Campus comments and preferences.

II. Construction Bidding Phase

- a. The Consultant prepares a Request for Proposal (RFP) for the Monitor. The intent is to have the firm in place prior to the Notice of Award to the Contractor. Qualifications and services described in the RFP will be reviewed and approved by the Campus and the Fund, and may include:
 - i. Qualifications: The Monitor shall have a minimum of five years' experience in monitoring projects similar to the construction work of this Project and be familiar with all applicable state and federal regulations pertaining to hazardous materials waste and asbestos abatement. Monitor for asbestos abatement:
 - 1) Possesses a valid NYS DOL project monitor certificate or a copy thereof in his or her possession at all times while working on the project.
 - 2) Has working knowledge and copies of the most recent edition of New York State (NYS) Department of Labor Industrial Code Rule 56, NYS Department of Health asbestos air/bulk sample collection and analysis methodologies, the ASTM "Asbestos Control: Surveys, Assessment, Abatement and Maintenance" manual, and other applicable standards, rules and regulations.
 - 3) Has knowledge of 6 NYCRR Parts 370 – 374 and 376 (NYS DEC's regulations on hazardous and universal waste.)
 - 4) Will not perform any asbestos abatement work on the project and has not retained or been retained by any contractor for work on the project.
 - 5) Possesses the tools, and working knowledge of their use, required for visual inspection, air monitoring and other job duties.
 - ii. Duties may include:
 - 1) Observing construction waste generating work (including preparation, pre-cleaning, removal, containerizing and labeling, and demobilization) and

- monitoring compliance contract documents and pertinent rules and regulations as currently amended, including NYSDOL ICR 56, EPA, NYS OSHA, NYS DEC, and other applicable governing bodies.
- 2) Monitoring and tracking all waste being generated from the project during construction, including hazardous and universal waste;
 - 3) Creating and maintaining an inventory of all waste containers on-site, with daily documented inspections of the containers;
 - 4) Monitoring the actual use of the waste containers, validating that what is on the label of the waste container is what is going into the container;
 - 5) Validating that the waste containers are appropriately labeled according to NYS DEC, US EPA and other applicable rules and regulations, and kept sealed and protected from the weather when not actively in use;
 - 6) Validating that the waste containers are in a secure location, such that no one has unauthorized access to the waste containers;
 - 7) Preparing a " Site Observation Report" (format approved by the Fund and Campus) for each day visited and provide a representative photographic survey of construction waste management activities and practices;
 - 8) Assisting the Campus by preparing, reviewing and recommending all paperwork, manifests, etc. for signature by their authorized representative;
 - 9) Signing waste profiles;
 - 10) Monitoring cleaning of the work areas and the handling, transport and disposal of waste, including adherence to time limitations in applicable rules and regulations and obtaining copies of relevant paperwork.
 - 11) Documenting when any waste leaves the project site (get copy of manifest, confirm/record transport company, driver, waste quantity and type (format approved by the Fund and Campus)).
 - 12) Confirming (by visiting, if required) actual storage, recycling/incineration and disposal locations.
 - 13) Reviewing and validating information on waste transporter permits, manifests, waste profiles, disposal site acceptance documents, and other documents requested by the Fund or Campus.
 - 14) For phased demolition and abatement, at the end of each phase of the work (do not wait to the end of the project), reviewing and validating that the required closeout paperwork for the asbestos and hazardous materials abatement is complete for the phase;
 - 15) Coordinating any hazardous waste disposal pickups with the Campus Hazardous Waste Specialist (Specialist) and the Campus Project Manager;
 - 16) Allowing the Specialist to review any waste manifest at least 3 business days in advance of any waste pickup;
 - 17) Giving the Specialist advance notice of at least 3 business days any hazardous waste pickups, such that the Specialist can be on-site to sign the manifest and obtain the appropriate copies for the Campus records;
 - 18) Attending construction meetings and other meetings as requested, being prepared to discuss observations and project status.

- 19) Being available to identify variance from best practices during the work involving asbestos abatement, hazardous materials, hazardous waste or universal waste.
- iii. For Asbestos Project Monitor, additional job duties are:
- 1) Becomes familiar with the asbestos survey(s) performed for the work, the work area(s), phases as/if applicable and their sequences, isolation methods, staging and access restrictions and other requirements of the work.
 - 2) Recommends additional inspection, sampling and testing as/if required to supplement the available asbestos survey(s).
 - 3) Inspect work areas with the contractor prior to abatement to confirm actual conditions, identify the pre-abatement cleaning requirements, agree on waste and waste water management, or where encapsulation may be permitted.
 - 4) Oversees the scope, timing, phasing and/or remediation methods to be utilized on and the completeness of any asbestos project
 - 5) Inspects isolation barriers, ventilation systems prior to and during abatement. Confirms that the Clean Room accommodates the air sampling technician and the project monitor.
 - 6) During the work, monitor removal, waste and water management practices. Confirm integrity of isolation barriers.
 - 7) Supervises/performs timely project air sampling and analysis, identifies where aggressive sampling is required.
 - 8) Confirms that the asbestos abatement contractor supervisor has complete a satisfactory physical and visual inspection for completeness of abatement and cleaning, including removals at edges, joints, seams, crevices, gaps, holes and other substrate qualities and/or imperfections where asbestos containing materials may be difficult to remove, or where site conditions make access to the work difficult.
 - 9) Provides the visual and physical inspection to confirm that the scope of abatement work and clean up for the asbestos project is complete as per the provisions of the current ASTM Standard E1368 "Standard Practice for Visual Inspection of Asbestos Abatement Projects". Directs the contractor to perform re-cleaning as/if required.
 - 10) Completes daily logs during abatement work that document all visual inspections made prior to either performing clearance air sampling or determining if work areas are exempt from clearance air sampling.
 - 11) Annotates plans showing where abatement has been complete, where encapsulation may have been permitted, and where ACM may still exist or where work was not performed.
 - 12) Authorizes in writing the breakdown of the regulated abatement work area, removal of all remaining barriers and waste removal from the site.
 - 13) Other duties as requested by the Fund.

- iv. RFP Describes when the work may be performed, during regular Campus work hours, at other periods of time, on weekends and holidays, or where other special shifts are required;
- v. RFP includes other services requested by the Campus.
- b. The Consultant obtains and negotiates cost proposals in accordance with directive 1C-4 Extra Compensation Authorization. Submit Extra Compensation request to the Fund using its Electronic Payment System.

III. Construction Phase

- a. The Consultant coordinates the work of the Monitor and coordination may include:
 - i. Inviting the Monitor to meeting and documenting attendance and comments in the minutes.
 - ii. Coordinating inspections by the Consultant and subconsultants with the Monitor's work.
 - iii. Coordinating work of the Consultant's Field Representative with the Monitor's work.
 - iv. Coordinating approval of Contractor's payment applications with the Monitor.
 - v. Reviewing and assembling reports, records, logs and other information from the Monitor and transmitting the same to the Campus.
 - vi. Modifying the duties of the Monitor to suit field conditions, field orders, change orders and other conditions that impact the Monitor's duties.
 - vii. Where modified duties change the Monitor's costs, obtaining and negotiating revised cost proposals in accordance with directive 1C-4 Extra Compensation Authorization.
