



CONSTRUCTION ENVIRONMENTAL HEALTH & SAFETY EXHIBIT **HAZARDOUS MATERIALS AND HAZARDOUS** **WASTE MANAGEMENT**

I. General Requirements

- A. All Contractors and Subcontractors performing work on projects conducted at or on behalf of the University shall comply with all applicable federal environmental regulations (EPA, OSHA, etc.), state environmental regulations (MassDEP, Department of Public Health, Massachusetts Water Resources Authority, etc.), and local environmental regulations and ordinances (as appropriate) as well as the University-specific guidelines outlined in the following Sub-Sections.
- B. The requirements included in the following Sub-Sections have been developed to aid Contractors and Subcontractors in navigating through relevant environmental regulations and potential environmental issues that may arise over the course of construction, therefore helping to minimize the overall impacts to the environment and to students, faculty, staff, and the general public. Where codes/regulations/requirements conflict, the more stringent guidelines shall apply.
- C. Harvard University shall not be responsible for materials and substances brought to the site by any Contractor. Each Contractor is responsible for the proper storage and management of hazardous materials in accordance with Federal, State and Local requirements. Further, each Contractor is responsible for the removal and disposition of all surplus chemicals (e.g., paints, lubricants, and cleaning products) that they bring on-site as part of the work. No Contractor shall use any drain, pipe or plumbing fixture for the disposal of any waste materials. No chemicals that the Contractor brings on-site shall remain on University property at the completion of the work without the written consent of the HUPM.
- D. The Contractor shall review all contract documents (specifications, drawings, referenced reports, etc.) and ensure that they are aware of the presence and locations of the hazardous materials that have been identified by the Owner or Owner's representative (e.g., asbestos, lead-based paint, oil, etc.). The Contractor shall retain the appropriate trained personnel to pre-abate all identified hazardous materials that are scheduled to be impacted by the work in accordance with the applicable specifications and drawings included with the contract documents.
- E. The General Contractor shall manage all hazardous waste in accordance with all applicable federal, state, and local regulations, including but not limited to the Massachusetts Hazardous Waste regulations at 310 CMR 30.000 and the Resource Conservation and Recovery Act (RCRA), 40 CFR Part 260, including any required agency notifications regarding the generation of hazardous waste.

II. Hazardous Waste

- A. The General Contractor shall manage all hazardous waste in accordance with all applicable federal, state, and local regulations, including but not limited to the Massachusetts Hazardous Waste regulations at 310 CMR 30.000 and the Resource Conservation and Recovery Act (RCRA), 40 CFR Part 260, including any required agency notifications regarding the generation of hazardous waste.
- B. The Contractor must provide the HUPM and HUEHS with a list of actual and potentially hazardous waste(s) to be generated during a project. Hazardous waste generated by a Contractor as part of its work is the responsibility of the Contractor.



CONSTRUCTION ENVIRONMENTAL HEALTH & SAFETY EXHIBIT **HAZARDOUS MATERIALS AND HAZARDOUS** **WASTE MANAGEMENT**

- C. The Contractor shall have primary generator responsibility for all such hazardous waste, except for waste that is abated from Harvard property (e.g., lead paint, asbestos, contaminated soil).
- D. The General Contractor shall develop a Hazardous Waste Plan that identifies all procedures for the safe handling of hazardous waste in accordance with applicable regulatory requirements. The Hazardous Waste Plan shall describe the Contractor's responsibilities related to hazardous wastes and shall include, but is not limited to the following: identification of those wastes classified as hazardous waste in accordance with all applicable regulations; proof of registration with EPA and/or MassDEP as a generator of hazardous waste and/or waste oil; and certification of appropriate hazardous waste training for all Employees. The General Contractor shall submit their Hazardous Waste Plan to the HUPM and HUEHS separately from the Project-Specific HASP.
- E. The Contractor shall establish and manage hazardous waste storage area(s) in accordance with the applicable regulatory requirements. These areas will be designated to safely store hazardous wastes. At a minimum, the Contractor shall visually inspect these areas weekly and document the inspections on an on-site log. The area shall be equipped with adequate signage, secondary containment, and an appropriately sized and compatible spill kit. Additional requirements may be necessary in accordance with the regulatory requirements.
- F. Containers of hazardous waste shall be properly labeled, stored in/on a secondary containment device, maintained in good condition and kept closed at all times and managed in accordance with the regulatory requirements.
- G. Each Contractor shall be responsible for coordinating the shipment of all hazardous waste where they have primary Generator responsibility, including signing all hazardous waste manifests. A copy of all hazardous waste manifests shall be provided to the HUPM and HUEHS at the end of the work and made available during the project upon request by the HUPM or HUEHS. Any person signing for or offering waste for transportation must be properly trained.

III. Transporting Hazardous Materials and Hazardous Waste

- A. Only Contractors licensed to transport hazardous materials/waste (under EPA and MassDEP regulations) shall be permitted to transport hazardous materials/waste. Transportation of hazardous materials/waste shall also comply with US DOT regulations and requirements.
- B. At no time shall the Contractor transport hazardous materials via public or private roads in a manner that could result in an unsafe condition for personnel or the environment
- C. Transportation of hazardous materials shall be conducted in accordance with all applicable regulations for proper packaging, marking/labeling, handling, and documenting.
- D. Contractors are responsible for ensuring that personnel preparing the shipment are properly trained and that proper shipping papers accompany shipments of hazardous materials and that a 24-hour emergency contact is available to address transportation related emergencies.
- E. Contractors are responsible for the proper placarding of vehicles prior to their exit from the site.



CONSTRUCTION ENVIRONMENTAL HEALTH & SAFETY EXHIBIT
HAZARDOUS MATERIALS AND HAZARDOUS
WASTE MANAGEMENT

IV. Previously Unidentified Hazardous Materials

- A. In the event any Contractor encounters previously unidentified material that is reasonably believed to be a hazardous substance or condition, including but not limited to, asbestos or polychlorinated biphenyls (PCBs), lead-based paint, oil or other petroleum products, pollutants, hazardous materials, contaminants, objectionable odors or noxious or odorous substances, the Contractor shall immediately stop work in the affected area and immediately report the condition to the HUPM and HUEHS. If the material is determined to be a hazardous substance through testing and analysis by qualified individuals, work in the affected area shall not thereafter be resumed except by written agreement between the HUPM and HUEHS and General Contractor (or where other arrangements are made by the HUPM). If the material is other than a hazardous substance, the work in the affected area shall be resumed upon direction by the HUPM. The Owner will be responsible for notifying regulatory agencies of the presence of this material, as required by existing Federal, State or local regulations or ordinances.
- B. The HUPM shall retain the services of licensed or qualified persons and a licensed laboratory to verify the presence or absence of the previously unidentified and untested hazardous substances. Should any Contractor discover materials or conditions previously hidden from view or uncharacterized based on information provided to the Contractor by the HUPM or HUEHS, the Contractor shall leave such substance undisturbed until identification has been completed by qualified persons. Unless otherwise required by the contract documents, the HUPM or HUEHS shall furnish in writing to the Contractor the names and qualifications of persons or entities who are to perform tests verifying the presence or absence of such material or substance or who are to perform the task of removal or safe containment of such material or substance. The Contractor agrees to cooperate with the HUPM and HUEHS, Architect and other consultants engaged by the HUPM and HUEHS to perform services with respect to the detection, removal, containment, treatment or disposal of hazardous substances. When the material or substance no longer poses a significant risk to human health based upon a determination of a Massachusetts Licensed Site Professional, Certified Industrial Hygienist, or other qualified individual, work in the affected area shall resume upon written agreement of the HUPM and Contractor.