



EH&S Construction/Renovation Project Checklist

Project Name: _____

Project Manager: _____

Project Sponsor: _____

Project Customer: _____

EH&S Contact: _____

Review Date: _____

EHS Impacts	Project Assessment	YES	NO	MAYBE	Requirement if 'Yes'
General	Will the Construction and Renovation require a design?				Please read and forward to your architect the Harvard Campus Services Environmental Health and Safety Guidelines for Design located here: https://www.ehs.harvard.edu/sites/ehs.harvard.edu/files/ehs_guidelines_for_design.pdf
Remediation	Will soil and/or groundwater be removed (e.g., excavated, moved or groundwater dewatered)? Note: New stormwater management practices may require re-infiltration of stormwater requiring soil removal for infiltration and impact on underlying groundwater.				Soils and groundwater may be contaminated and the proper management of any contaminated soils and groundwater are strictly regulated by the Massachusetts Department of Environmental Protection (MassDEP).
Construction Safety	Has the Harvard University Construction EH&S Standard been incorporated by reference in RFP's, bid, and contract documents? Has EH&S Service Contractor Safety Guide been incorporated by reference in contracts for smaller renovation and maintenance projects?				The Construction EH&S Standard applies to all capital projects and must be incorporated by reference in RFP's, bid, and contract documents. https://www.ehs.harvard.edu/programs/construction-safety-standard Smaller renovation/maintenance project work should reference the EH&S Service Contractor Safety Guide in the contract. https://www.ehs.harvard.edu/programs/service-contractor-safety
Hazardous Materials Abatement	Will the project involve the disturbance or removal of building materials that may contain hazardous materials including, asbestos, lead paint, and polychlorinated biphenyls? <i>This includes but is not limited to walls, ceilings, flooring materials, casework, blackboards, sinks, plumbing, lighting, wiring, roofing, HVAC equipment, caulking, etc.)</i>				Certain buildings materials may contain hazardous materials including asbestos, lead paint, and polychlorinated biphenyls. Special considerations must be given to removal of those materials.
Hazardous Material Disposal	Will the project generate hazardous waste or potentially hazardous waste (e.g. façade washing, waste chemicals, contaminated soil or water, lead paint, PCBs, fluorescent light bulbs, ballasts, oily water, etc.)?				Certain waste disposal activities must be managed by the contractor for their specific wastes. Other wastes must be managed by Harvard EH&S. Any waste shipped from Harvard must be sent to a Harvard approved disposal site. All shipments of hazardous waste must be signed off on by an authorized individual (usually a trained and authorized EH&S representative)
Food Service Areas	Does the project involve a food service establishment – either a renovation of an existing establishment, or the development of a new food service venue? <i>(Potential Permit/License requirement*)</i>				Food service construction activities are regulated through the local Boards of Health, and EH&S reviews proposed equipment layout plans to ensure regulatory compliance prior to build-out. Regulatory liaison services are also available.



EH&S Construction/Renovation Project Checklist

EHS Impacts	Project Assessment	YES	NO	MAYBE	Requirement if 'Yes'
Wastewater/ Stormwater	<p>Will stormwater runoff be impacted? Is the area of disturbance greater than 1 acre?</p> <p>Will the work be conducted near an easement (e.g., MWRA, BWSC?)</p> <p>Will the project result in discharge to a public water system?</p> <p><i>(Potential Permit requirement*)</i></p>				<p>Stormwater runoff design considerations must be taken into account both during and after construction. The Cities of Cambridge and Boston have set requirements for stormwater management and should be consulted early in the design process. EH&S must be given the opportunity to comment on any stormwater documentation sent to the City to ensure that future O*M projections will match the university's stormwater management plans.</p> <p>Intrusive activities in or near an easement will require coordination and possible permitting with the agency.</p>
Wastewater/ Stormwater	<p>Will the project generate waste water (e.g. from washing equipment or dewatering, laboratories)?</p> <p>Will the project require connection to an existing sewer?</p> <p><i>(Potential Permit/License requirement*)</i></p>				<p>The discharge of wastewater from the project site, including dewatering and truck or vehicle washing is regulated by the Massachusetts Water Resource Authority (MWRA).</p>
Wastewater/ Stormwater	<p>Does the project involve installation of geothermal wells or storm water re-infiltration?</p> <p><i>(Potential Permit/License requirement*)</i></p>				<p>Geothermal wells and stormwater infiltration systems require permitting under MassDEP, additionally cities and towns may have additional requirements for stormwater re-infiltration both during construction and once the project is complete. EH&S needs to be involved during SWPP development in order to ensure that future O&M projections will match the university's stormwater management plans.</p>
Wastewater/ Stormwater	<p>Will the project require flushing of piping, tanks, and/or equipment with large amounts of water prior to operation? For example, flushing out of large diameter long run cooling pipes.</p>				<p>Discharge of flushing water will likely require MWRA approval. Reach out to MWRA early in the construction process to discuss discharge options. EH&S can provide assistance as needed.</p>
Wastewater/ Stormwater	<p>Will the project involve dye testing of either sewer or stormwater piping?</p>				<p>Proper notification to authorities is required prior to dye testing. EH&S has a list of local, state and federal contacts and can assist with those notifications as needed.</p>
Wastewater/ Stormwater	<p>Will the project involve installation of a new and/or upgraded pH neutralization system?</p>				<p>Any new pH system must be added to one Harvard's existing MWRA permits or setup as a stand-alone permitted location. Upgrades require written notification to the MWRA 60-days prior to completion. EH&S will be responsible for permitting and notifications to the MWRA but will need information provided by the contractor.</p>
Air Quality	<p>Will the project install or replace boilers, engines, turbines, generators, cooling towers, diesel fire pumps, lab exhausts, paint spray booths, process equipment that uses chemicals?</p> <p><i>(Potential Permit/License requirement*)</i></p>				<p>Air permits are required in Massachusetts for certain equipment and processes. In addition, Harvard's campuses have campus-wide permits that require each project to be considered both individually and as it impacts the University. Equipment and exhaust stacks are regulated by MassDEP and the U.S. EPA.</p>
Air Quality	<p>Will the project require the installation or removal of equipment containing refrigerants?</p> <p><i>(Potential Permit/License requirement*)</i></p>				<p>Refrigerants must be properly managed and recycled only by licensed technicians.</p>



EH&S Construction/Renovation Project Checklist

EHS Impacts	Project Assessment	YES	NO	MAYBE	Requirement if 'Yes'
Air Quality	Is there a potential for fugitive dusts or objectionable odors to be created during construction activities?				Certain activities that can create fugitive dusts or odors must be monitored during construction activity.
Oil/SPCC/Tanks	Will electrical transformers or other electrical equipment be removed, installed or impacted?				Transformers and other electrical equipment may contain PCBs or other hazardous materials that must be properly managed.
Oil/SPCC/Tanks	Does the work involve the use of oil or chemicals and will the work be conducted near any active drain structures that could create the potential for a spill or discharge to the environment of oil or hazardous material? (i.e. to air, land, surface water or groundwater?)				Harvard maintains a Spill Prevention Control and Countermeasure plan that must be adhered to for projects and operations.
Oil/SPCC/Tanks	Will the project involve the removal, installation or modification of an underground or aboveground storage tank system? (Potential Permit/License requirement*)				Underground tanks that are taken out of service must be removed within 6 months. Tanks must not be removed from the ground without EH&S involvement.
Pest Control	Will the project involve opening, renovating or abandoning components of sanitary waste or stormwater systems?				The opening or abandonment of sanitary waste or stormwater systems may risk introducing or fostering rodent and insect pests. Enhanced pest management efforts must be considered.
Pest Control	Will the project modify the volume or kind of refuse / recycling / compost generated or stored?				Changes to the waste stream may require permits for dumpsters and compactors, and a means to clean these into a sanitary sewer connection. Equipment and location permits may be required by city codes.
Pest Control	Will any of the construction activities result in M/E/P, IT or other penetrations/holes in walls, floors or ceilings? Will project include entrance or exit doors/vestibules?				Harvard's Construction Integrated Pest Management Standard applies. EHS will conduct a plan review and supply specifications for pest exclusion sealing.
Fire Safety	Will the project include alteration to structures in the course of construction, alteration and demolition including underground locations? Has a fire safety code assessment been completed to ensure that the current project scope includes necessary fire and life safety upgrades to bring into/remain in compliance?				A Code Consultant should be included on the project team along with EH&S support will be required. The NFPA241 plan provides for measures for preventing or minimizing fire damage to structures, including those in underground locations.
Fire Safety	Will construction, alteration or demolition activities create or require "Hot" work activities"?				Hot work activities require planning to implement and monitor required safety precautions. Hot work activities must be reviewed with the Project Team/Facilities and comply with the Authority Having Jurisdiction in regard to permitting and certification of fire watch personnel.
Fire Safety	Does the project include the addition or modification of: -Fire detection systems - Fire Pumps, or - Fire Suppression Systems? Is the project in a location where these systems are not currently in place or where there are partial systems and systems should be put into service?				A Code Consultant should be included on the project team along with EH&S support.



EH&S Construction/Renovation Project Checklist

EHS Impacts	Project Assessment	YES	NO	MAYBE	Requirement if 'Yes'
Fire Safety	Will the project diminish or temporarily alter or compromise the building's life safety systems; exit access, exit, or exit discharge; involve temporary sources of ignition; or the increase the present of combustibles or flammables?				Contact the area's facilities maintenance organization to address Interim Life Safety Measures
Fire Safety	Does the facility have a current flammable storage permit and if needed license and will the project require the permit/license to be amended? Will the project create or require additional control areas for flammables?				A Code Consultant should be included on the project team along with EH&S support, and Harvard Fire Safety.
Fire Safety	Will the project create a space where more than 49 people gather at one time?				A Code Consultant should be included on the project team to obtain Assembly Permit. Flame spread certifications must be retained in permanent files for review by Boston Fire Department.
Laboratories	Will the project involve renovation or construction of a lab space?				Laboratory move and decommissioning must be considered and coordinated with EH&S. New laboratory space must consider the type of activity to be performed in the lab space (e.g., Radiological Safety, Biosafety, Chemical Safety, etc.)
Laboratories	Will fume hoods be added, altered, or removed?				Fume hoods provide a specific worker/lab safety function. When altering a hood, adding new hoods or changing the design, the potential impact on the room/area's ventilation balance should be considered. The local exhaust ventilation should be considered in the context of the laboratory's hazards. For special hazards (e.g. heat use of perchloric acid) EH&S should be involved.
Laboratories	Will fume hood ventilation ductwork be modified?				Any fume hood ductwork to be impacted should be considered as part of the laboratory decommissioning process.
Laboratories	Will the project require work near or removal of radioactive materials, x-ray machines, or lasers? <i>(Potential Permit/License requirement*)</i>				Harvard University's use of ionizing & non-ionizing radiation sources is regulated by the Massachusetts Department of Public Health, Radiation Control Program. Special considerations may be needed to ensure worker and equipment safety.
Laboratories	Will the project involve a location that is planning to use biological agents or toxins or toxic or inert gases? Examples of these gases are nitrogen, ammonia, silane, etc. <i>(Potential Permit/License requirement*)</i>				The use of biological agents, toxic or inert gases may present unique hazardous conditions in the area or space. Special design considerations and alarm systems must be considered.
Laboratories	Will the project create a new lab space in the City of Boston?				Lab space must be registered with the Boston Fire Department.
Laboratories	Will the project involve a location that is planned for animal surgery?				A Code Consultant should be included on the project team to address special evacuation procedures involving large animals under anesthesia.