Contractor Environmental Health & Safety Program

The George Washington University
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INTRODUCTION

Purpose Statement:
To provide contractors with a clear and concise understanding of the safety requirements and responsibilities while working on The George Washington University’s property as well as to reduce exposures that cause personal injury, property damage, and liability losses due to construction, renovation and demolition of University-owned buildings and facilities.

1.0 Objectives

The major objectives of the Contractor Safety Program are to:
- Inform contractors of their responsibilities when working on University property.
- Protect employees, students, visitors, property, and the environment from potential hazards.
- Comply with all federal and local safety and environmental regulations.

2.0 Responsibilities

2.1 Contractor Responsibilities
- Contractors are expected to implement their own environmental health and safety programs.
- Prior to starting a project, each contractor is required to review the work site and identify hazards that may occur while performing the job.
- The contractor shall ensure proper environmental health and safety precautions are followed in accordance with the Occupational Safety and Health Administration’s (OSHA) and the Environmental Protection Agency’s (EPA) Code of Federal Regulations (CFR).
- The contractor shall ensure individuals working at the site are trained and are aware of potential hazards. Contractors shall also ensure that these individuals are provided with proper safety equipment to prevent accidental injury in accordance with OSHA’s CFR.
- The contractor shall ensure all personnel follow the guidelines of OSHA, EPA, and the University's policies, in addition to any guidelines of the jurisdiction(s) in which the operations will be performed.

2.2 GWU Project Manager Responsibilities
- Ensure contractors are aware of their responsibilities under the GWU Contractor Safety Program.
- Ensure contractors have their own Environmental Health and Safety programs in place in accordance with federal and local regulations.
- Ensure all potential work-site hazards are addressed in the pre-construction planning process.
- Notify the Office of Risk Management (RM) of the project nature and duration prior to the start of planned work activities.
- Notify RM of any new developments in the project potentially affecting site environmental health and safety hazards.

3.0 Contractor Insurance Requirements

Prior to start of work, not over seven (7) days after an award of construction contract, and for the duration of the project the following minimum insurance coverage shall be maintained by the Contractor and any subcontractors working on the project. GWU withholds the right to increase coverage requirements based on project specifications, duration, and potential loss.

Statutory Worker’s Compensation Insurance complying with the requirements of the statutes of the jurisdiction(s) in which the operations will be performed, covering all employees of the Contractor. Employer's Liability Insurance coverage with limits of not less than $1 million for each accident or illness shall be included.
Comprehensive General Liability Insurance covering the liability of the Contactor with respect to all operations to be performed and all obligations assumed by the Contactor under the terms of this agreement. Products & Completed Operations, Independent Contractors, Contractual Liability, and Property Damage Liability (arising out of the so called “XCU” hazards) coverages are to be included. GWU shall be named as an additional insured with respect to the operations to be performed. Coverage under this policy or policies shall have combined single limits of not less than $2 million per occurrence. Liability insurance shall be long-term occurrence coverage; claims - made coverage will not be accepted.

Comprehensive Automobile Liability Insurance covering the liability of the Contactor arising out of the use of ANY VEHICLES which bear, or are required to bear license plates according to the laws of the jurisdiction in which the are to be operated, and which are not covered under the Contractor’s Comprehensive General Liability Insurance. GWU shall be named as an additional insured with respect to the operations to be performed. Coverage under this policy shall have not less than $1 million per occurrence. In the event the Contactor or its transporter are removing and disposing of any hazardous materials or wastes off the jobsite, a MCS-90 Endorsement shall be added to this policy and the combined single limits are to be increased to $5 million per occurrence.

The required insurance must be written by insurance companies licensed to do business in the jurisdiction(s) where the work is being performed. The Contactor shall require all subcontractors to carry the insurance required herein. A certificate of insurance evidencing the placement of the required insurance must be provided to GWU prior to the start of work. A copy of the policy itself shall be provided if requested by GWU. Cancellation or reduction in coverage or any restrictions or limitations on the coverage will not be permitted. An umbrella or excess liability insurance policy may be used, in combination with the commercial general liability and automobile liability policies, in order to meet the specified minimum liability limits. All applicable deductibles shall be the responsibility of the Contractor to pay in the event of a loss.

Indemnification – The Contractor shall defend, indemnify and hold harmless GWU from any and all suits, actions and claims by its employees who suffer personal injury while on the premises of GWU provided such injuries are not caused by the sole negligence of GWU. The Contractor shall also defend, indemnify and hold harmless GWU from any and all suits, actions and claims by third-parties who suffer personal injury and/or property damage caused by the negligence or fault of the Contractor, its employees, and/or its subcontractors. The Contractor shall be responsible for any damage to 1) the Contractor’s property while on GWU property, 2) GWU property under construction by the Contractor, and 3) GWU property caused by the negligence or fault of the Contractor, its employees, and/or subcontractors.

4.0 Hazard Information

- Prior to the start of the project, the contractor shall contact Facilities Development to ensure that they have received pertinent information for the project including permits, floor plans, and utility information.

- The contractor shall be responsible for the removal and/or disposal of hazardous waste generated from the project. Hazardous waste generated from the project must be removed and disposed of in accordance with federal and local regulations and the University’s Hazardous Waste Management Plan (HWMP). The Office of Risk Management is available to address any related hazardous waste concerns and must be consulted prior to the removal of any hazardous waste from University property.

All contractors performing inspections, construction, and repairs at the University are to comply with the requirements of this manual. Failure to adhere to these requirements may result in an immediate shutdown of the work site and a breach of contract with the University.
Chapter 1

ASBESTOS

PURPOSE
To inform contractors of their responsibilities under the University's Asbestos Management Program, in order to prevent the unintentional disturbance of Asbestos Containing Materials (ACM).

ASBESTOS-CONTAINING MATERIALS (ACM)
University buildings built pre-1980 are assumed to contain asbestos until proven otherwise by the Office of Risk Management. Types of ACM found in University buildings include:

- Thermal system insulation (pipe, boiler, breaching, fume hoods)
- Fireproofing (spray-applied insulation, fire doors)
- Compounds (caulking, mastics, adhesives, plaster, joint compound)
- Flooring (vinyl floor tile, sheet goods, resilient)
- Textiles (cloth, rope, fire curtains)
- Cementitious (countertops, chalk boards, roofing and siding shingles)
- Acoustical (ceiling and wall tile)

RESPONSIBILITIES
Before undertaking any projects of repair, renovation or construction that may impact asbestos, contractors shall:

- Request from the Project Manager the location of asbestos containing building materials in the work area.
- Ensure all work is compliant with all applicable federal and local regulations.
- Understand if a suspect material is encountered, they should immediately stop work and notify Risk Management.
- In the event that asbestos is impacted, take all necessary precautions to protect University employees, students, and visitors from the exposure to asbestos fibers or contamination.
- Make certain that their employees and subcontractors have had the appropriate level of awareness training as required by OSHA.
- If negative exposure assessments are mutually agreed upon, the contractor will perform the evaluation and provide their employees with the appropriate personal protection.
- Contact the Project Manager and/or Risk Management at 202-994-3265 with any questions regarding asbestos.

REGULATIONS

ACCOUNTABILITY
Contractors will be responsible for complying with the above guidelines and for communicating the information to their employees and subcontractors. This includes the implementation of policies and procedures. All work shall be performed in accordance with all applicable laws and regulations.
PURPOSE
To inform contractors of their responsibility to maintain a safe and accessible path-of-travel for all pedestrians, including those with disabilities, around and/or through construction sites. Barricades act as warning devices, alerting others of the hazards created by construction activities, and should be used to control traffic, both vehicular and pedestrian, safely through or around the work site.

ACTIVITIES
While barricades shall be used wherever necessary for the physical protection of people or property, the following is a list of activities where their use may be required:

- Wherever construction debris is dropped without the use of an enclosed chute.
- Areas with temporary wiring operating at more than 600 volts.
- Work areas for electrical equipment with exposed, energized parts.
- The swing radius of the rotating superstructure of cranes or other equipment.
- Wherever equipment is left unattended near a roadway at night.
- Excavations.
- Areas used for the preparation of explosive charges or blasting operations.
- Street openings, such as manholes.
- Construction areas in energized electrical substations.

RESPONSIBILITIES
The contractor shall:

- Erect and maintain for the duration of the Contract proper barricades including fencing material, traffic cones, A-frames, caution tape and temporary curb ramps complying with all access codes and regulations at all closed crosswalks and existing closed curb ramps.
- Obtain all applicable permits required by the regulations.
- Furnish, erect, and maintain all necessary signs, barricades, lighting, fencing, bridging, and flaggers that conform to the requirements set forth by OSHA.
- Ensure that no construction materials be stored and/or placed on the path-of travel.
- Maintain the construction barriers in a sound, neat, and clean condition.
- Not occupy public sidewalks except where pedestrian protection is provided. The Contractor shall not obstruct free and convenient approach to any fire hydrant, alarm box, or utility box.
- Remove barriers and enclosures upon completion of the work in accordance with applicable regulatory requirements and to the satisfaction of the owner.
- Provide protection for pedestrians consistent with all local and federal codes, including the Americans with Disabilities Act.

REGULATIONS

ACCOUNTABILITY
Contractors will be responsible for complying with the above guidelines and for communicating the information to their employees and subcontractors. This includes the implementation of policies and procedures. All work shall be performed in accordance with all applicable laws and regulations.
CONFINED SPACE ENTRY

PURPOSE
To inform contractors of their responsibilities when performing confined space entry activities at the University. Workers must be protected from toxic, explosive, or asphyxiating atmospheres, and from engulfment when working in and around confined spaces.

ACTIVITIES
Types of confined space entries include, but are not limited to: Telecommunication manholes, HVAC systems, PEPCO manholes, steam manholes, crawlspace, boilers, injector pits, tanks, and water-meter manholes.

RESPONSIBILITIES
The contractor shall:
- Identify permit-required confined spaces.
- Evaluate each confined space for the following:
  - Presence of explosive gases equal to or greater than 10% of lower explosive limit (LEL).
  - Oxygen Deficiency and Oxygen Enriched Atmospheres
  - Concentrations of Carbon Monoxide and Hydrogen Sulfide.
  - Electric shock, burns, walking/working surfaces, heat stress, noise hazards, and/or any other recognized hazard.
- Control potential hazards with the following measures:
  - Mechanical – Use proper lockout/tagout procedures when needed to prevent hazards within the confined space.
  - Ventilation – If exposed to harmful vapors or an oxygen deficient atmosphere exists; a ventilation fan shall be used for the duration of the job.
  - Slips and Falls – Use caution if shoes and/or ladders are wet or oily. Inspect shoes prior to entry.
  - Burns and Heat Stress – The use of a ventilation fan will provide cooler temperatures. Use caution around hot equipment and avoid overexertion within the space. Take frequent breaks if needed.
- To prevent an explosion, do not use equipment that may cause flame or sparks in an oxygen-enriched atmosphere.
- Personal protective equipment (goggles, gloves, dust mask, respirator) shall be worn when a potential hazard exists.
- Obtain any available information about permit space hazards and entry operations from the Office of Risk Management.
- Evaluate and monitor confined space hazards.
- Coordinate entry operations when employees are working in or near the area.
- Inform the Project Coordinator of entry procedures that will be followed and of any hazards identified or created.
- Provide documentation of their company’s entry procedures to Risk Management before work begins.

RESCUE OPERATIONS
In the event of an emergency requiring entry rescue services, the attendant shall immediately CALL 911. Only a trained rescue team supplied by the Local Fire Department can perform emergency rescues. In the event of an emergency that requires non-entry rescue services on the Foggy Bottom Campus, the attendant shall immediately call The University Police Department at (202) 994-6111, or (202) 242-6111 on the Mount Vernon Campus. For all rescue services, entry or non-entry on the Northern Virginia Campus, the attendant shall immediately call 911.

REGULATIONS
OSHA 29 CFR 1910.146, Permit Required Confined Spaces; OSHA 29 CFR 1926.353(b) Ventilation for Welding, Cutting, and Heating; and any other applicable regulations.

ACCOUNTABILITY
Contractors will be responsible for complying with the above guidelines and for communicating the information to their employees and subcontractors. This includes the implementation of policies and procedures. All work shall be performed in accordance with all applicable laws and regulations.
Chapter 4 INDOOR ENVIRONMENTAL QUALITY

PURPOSE
To inform contractors of their responsibility to minimize the impact construction-related activities have on indoor environmental quality at the University.

ACTIVITIES IMPACTING AIR QUALITY
Many construction-related activities generate and disperse contaminants that adversely impact indoor environmental quality.

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RESPONSIBILITIES
Prior to performing construction-related activities including repair projects, contractors shall eliminate or minimize any potential contaminant/physical agent exposures by implementing the following procedures:

- Maintain good housekeeping habits to contain dust and construction debris. Use a HEPA filtered vacuum to minimize recirculation of contaminants.
- Implement engineering controls, such as dilution or local exhaust ventilation and isolation of mechanical systems.
- Install critical barriers made of polyethylene sheeting on doors, windows, vents, etc. in order to isolate the specific work area.
- To minimize dust, use wet methods when appropriate.
- Have trained employees and approved equipment on site prior to performing work.
- Conduct work activities in a safe manner.
- Use the least toxic material suitable for the application (for example, latex paint rather than oil-based)
- Communicate with University project manager to implement effective strategies (for example, working off hours) to minimize occupant exposure.
- Relocate sources of contamination (for example, a diesel generator or tar kettle) away from the building air intake.

REGULATIONS
The current regulatory permissible exposure limits (PEL’s) as set by the Occupational Safety & Health Administration, and any other applicable regulations.

ACCOUNTABILITY
Contractors will be responsible for complying with the above guidelines and for communicating the information to their employees and subcontractors. This includes the implementation of policies and procedures. All work shall be performed in accordance with all applicable laws and regulations.
Chapter 5

LOCKOUT / TAGOUT

PURPOSE
To inform contractors of their responsibilities when performing lockout/tagout activities at the University to ensure all persons potentially affected by de-energizing or re-energizing of building systems are properly protected and notified.

ACTIVITIES
Hazardous energy must be isolated or "locked and tagged out" before servicing and/or maintenance activities are performed. The following types of hazardous energies are typically found at the University:

- Electrical
- Pneumatic
- Mechanical
- Thermal
- Hydraulic
- Chemical

RESPONSIBILITIES
The contractor is responsible for the following at the University:

- Having a lockout/tagout program prior to performing work.
- Having trained employees prior to performing work.
- Understanding and complying with the University’s lockout program.
- Informing the Office of Risk Management (RM) if their program deviates from the University’s program.
- Coordinating with University representatives prior to performing lockout/tagout activities.
- Providing their own lockout/tagout equipment that meet OSHA standards.
- Performing lockout/tagout activities in accordance with OSHA standards.
- Knowing that copies of the University’s program are available in the Office of Risk Management located in Suite 101 of the Support Building, Foggy Bottom Campus.
- Following special procedures for jobs requiring multiple lockout devices and those involving shift or personnel changes.

REGULATIONS
OSHA 29 CFR 1910.147, The Control of Hazardous Energy; OSHA 29 CFR 1926.417, Locking and tagging of circuits; and any other applicable regulations.

ACCOUNTABILITY
Contractors will be responsible for complying with the above guidelines and for communicating the information to their employees and subcontractors. This includes the implementation of policies and procedures. All work shall be performed in accordance with all applicable laws and regulations.
Chapter 6  FALL PROTECTION

PURPOSE
To inform contractors of their responsibilities when performing work at elevated locations at the University.

ACTIVITIES
Contractors working at unguarded locations above six feet must provide their employees with fall protection. Potential activities requiring fall protection may include working on:

- Portable and fixed ladders
- Aerial lifts
- Scaffolds
- Roofs
- Elevated work locations and platforms

RESPONSIBILITIES
Contractors have the responsibility to:

- Reduce the hazards associated with falls.
- Control fall hazards first through engineering controls.
- Institute personal fall arrest systems, administrative controls and training when engineering controls are not feasible.
- Have a formal fall protection program in accordance with OSHA requirements.
- Have the necessary fall protection equipment to safely perform the job.
- Have workers properly trained in the use of fall protection equipment.
- Have supervisors (or competent personnel) who ensure the use of fall protection equipment as required.

REGULATIONS
The contractor’s fall protection program shall include, but not be limited to the regulations below:

- Fall Protection OSHA 29 CFR 1926 Subpart M;
- Walking and Working Surfaces OSHA 29 CFR 1910 Subpart D;
- Scaffolds OSHA 29 CFR 1926 Subpart L;
- Aerial Lifts OSHA 29 CFR 1926.453;

and any other applicable regulations.

ACCOUNTABILITY
Contractors will be responsible for complying with the above guidelines and for communicating the information to their employees and subcontractors. This includes the implementation of policies and procedures. All work shall be performed in accordance with all applicable laws and regulations.
Chapter 7

HOT WORK PERMIT

PURPOSE
To inform contractors of their responsibilities when performing hot work activities at the University. The hot work permit is designed to reduce the potential of an uncontrolled ignition of materials in a hot work area.

ACTIVITIES
Hot work is any activity that creates heat, flame, sparks, or smoke. Examples of hot work include but are not limited to:

- Brazing
- Cutting
- Grinding
- Soldering
- Gas or Arc welding
- Torch-applied roofing

Hot work permits are not required during the construction of new facilities or renovations of unoccupied existing facilities.

RESPONSIBILITIES
The contractor is responsible for the following at the University:

- Understanding and complying with the University’s hot work permit program.
- Having trained employees and approved fire prevention equipment on site prior to performing work.
- Obtaining a hot work permit from the appropriate University department and/or project manager prior to the hot work activity. To obtain a permit on the Foggy Bottom Campus, contact Facilities Management Emergency Minor Maintenance at 202-994-6706; on the Mount Vernon Campus, contact the Campus Operations office at 202-242-6650; and on the Northern Virginia Campus, contact the Operations Office at 703-726-3510.
- Acquiring a hot work permit prior to performing hot work within:
  - Occupied existing facilities,
  - 40 feet of a building or potential hazard such as a fuel storage tank, and
  - Confined spaces regardless of location.
- Coordinating with Facilities Management or Building Management the temporary shutdown of localized fire systems to prevent possible fire alarm activation and disruption of normal business operations.
- Posting the hot work permit at the job site in an accessible and conspicuous location.
- Submitting the hot work permit to the appropriate University department and the Office of Risk Management at the completion of the activity.
- Knowing that copies of the University’s Hot Work program are available at the Risk Management Office.
- Conducting their hot work activities in a sound fire safe manner and following the precautions outlined on the hot work permit.
- Assuring that a firewatcher remains on the job for 60 minutes after the completion of the hot work activity.

REGULATIONS
OSHA 29 CFR 1926 Subpart J, Welding and Cutting; OSHA 29 CRF 1910 Subpart Q, Welding, Cutting, and Brazing; and any other applicable regulations.

ACCOUNTABILITY
Contractors will be responsible for complying with the above guidelines and for communicating the information to their employees and subcontractors. This includes the implementation of policies and procedures. All work shall be performed in accordance with all applicable laws and regulations.
PURPOSE
To inform contractors of their responsibilities under the University’s Mold Management Program.

MOLD
Fungi are present almost everywhere in indoor and outdoor environments. With high levels of humidity in the District of Columbia and Virginia, University buildings are subject to mold growth. Certain types of mold can produce toxins, which can cause allergic reactions and produce flu-like symptoms.

Mold may be found, among other places, in the following building components or furnishings:

- Drywall
- Insulation
- Carpeting
- Flooring

RESPONSIBILITIES
Before undertaking any projects of repair, renovation or construction that may impact mold, contractors shall:

- Request from the Project Manager the location of mold in the work area.
- Stop work if mold is encountered and notify the Project Manager or Risk Management.
- Make certain that their employees and subcontractors have had the appropriate level of mold awareness training.
- Contact the Project Manager and/or Risk Management at 202-994-3265 with any questions regarding mold.

REGULATIONS
Currently, there are no federal, state, or local regulations for evaluating potential health effects of fungal contamination and remediation. The New York City Department of Health (DOH) Guidelines have been adopted by the University to be used as a guideline for its mold management program.

ACCOUNTABILITY
Contractors will be responsible for complying with the above guidelines and for communicating the information to their employees and subcontractors. This includes the implementation of policies and procedures. All work shall be performed in accordance with all applicable laws and regulations.
Chapter 9
SCAFFOLDING

PURPOSE
To inform contractors of their responsibilities, while performing work at the University, in the use and/or erection of scaffolding.

RESPONSIBILITIES
Before undertaking any projects of repair, renovation or construction, that may require the use of scaffolding, contractors shall:

- Understand and comply with the University’s Contractor Safety Program.
- Ensure all employees have received training in compliance with federal and local regulations.
- Contact the GWU Project Manager with questions regarding scaffolding safety and required precautions.

The contractor shall ensure that the scaffolding be:

- Erected and dismantled by competent workers, under the supervision of knowledgeable and experienced supervisors.
- Erected on sound and rigid footing, capable of carrying the maximum intended load without settling or displacement.
- Securely fastened with all braces, pins, screw jacks, base plates and other fittings installed as required by the manufacturer.
- Limited to authorized personnel only, especially after working hours.
- Equipped with standard guardrails and toeboards on all open sides and ends of platforms four (4) to ten (10) feet in height.
- Provided with a screen with maximum ½ inch openings between the toeboard and the guardrail, where persons are required to work or pass under the scaffold.
- Replaced or repaired immediately if scaffolding and accessories have any defective parts.
- Provided with an access ladder or equivalent safe access.

The contractor shall ensure that the planking be:

- Scaffold grade or equivalent.
- Overlapped a minimum of 12 inches or secured from movement.
- Extended over their end supports not less than 6 inches nor more than 12 inches.

REGULATIONS
OSHA 29 CFR 1926, Subpart L, Scaffolding; OSHA 29 CFR 1910.28, Safety requirements for scaffolding; and any other applicable regulations.

ACCOUNTIBILITY
Contractors will be responsible for complying with the above guidelines and for communicating the information to their employees and subcontractors. This includes the implementation of policies and procedures. All work shall be performed in accordance with all applicable laws and regulations.
Chapter 10
LEAD-BASED PAINT

PURPOSE
To inform contractors of their responsibilities under the University’s Lead Management Program and to provide guidelines to contractors who may potentially impact lead-based paint at GWU.

GENERAL
University buildings constructed before 1978 are assumed to contain lead-based paint unless determined by the Office of Risk Management not to contain lead-based paint. Although lead-based paint materials may not present any health hazards while intact, any impact created by demolition or other activities related to renovations or repair projects may present significant health hazards. In the construction industry, most overexposures to lead are found in the trades, such as welding, painting, and demolition. The District of Columbia and Virginia have implemented regulations regarding all work involving lead-based paint.

RESPONSIBILITIES
Before undertaking any projects of repair, renovation or construction, that may impact lead-based paint, contractors shall:

- Request from the Project Manager the location of lead-containing building materials in the work area.
- Ensure all work is compliant with all regulations cited below.
- In the event that lead-based paint is impacted, take all necessary precautions to protect University employees, students, and visitors from the exposure to lead dust or contamination. Such measures may include using plastic sheeting to isolate the work area, using wet techniques, and/or using a HEPA vacuum.
- Contact the Project Manager and/or Risk Management at 202-994-3265 with any questions regarding lead-based paint.
- Refer to Chapter 18 of the manual for more information on the transportation, handling, and disposal of potentially hazardous wastes.

REGULATIONS
OSHA 29 CFR 1910.1025 (Lead in General Industry);
OSHA 29 CFR 1926.62 (Lead in Construction);
OSHA 29 CFR 1926.103 (General Industry Respiratory Standard);
EPA 40 CFR 745 (Lead-Based Paint Poisoning in Certain Residential Structures);
DC Act 11-438 and DC LAW 11-221 (Lead-Based Paint Abatement: Control Act of 1996);
and any other applicable regulations.

ACCOUNTIBILITY
Contractors will be responsible for complying with the above guidelines and for communicating the information to their employees and subcontractors. This includes the implementation of policies and procedures. All work shall be performed in accordance with all applicable laws and regulations.
Chapter 11

FLUORESCENT LIGHT BALLAST DISPOSAL

PURPOSE
To inform contractors of their responsibilities for the proper disposal of PCB and “No PCB” light ballasts from University property.

GENERAL
Prior to 1978, electrical light ballasts were commonly manufactured with PCBs in the capacitor oil and in a tar-like substance that surrounds ballast components called “potting compound.” PCBs are regulated because they are carcinogenic and pose a long-term hazard due to their persistence in the environment. Ballasts made after 1978 are usually marked "NO PCB", however they may contain a PCB replacement called DEHP, a probable human carcinogen. Given this possibility, the best option for No-PCB ballasts is recycling.

RESPONSIBILITIES
Before undertaking any projects of repair, renovation or construction, that may require the disposal or recycling of PCB and No-PCB light ballasts, contractors shall:

- Read and understand the University’s guidelines.
- Notify the GWU Project Manager and the Office of Risk Management (RM) of the project nature and duration prior to the start of the planned work activity.
- Plan to detach ballasts from lamp fixtures and strip all wiring.
- Plan to collect and segregate PCB ballasts and No-PCB ballasts for disposal/recycling purposes.
  
  Note: All light ballasts made prior to 1978 and not marked “NO PCB” are assumed to contain PCB’s, and are also treated as such.
- If ballasts/capacitors are leaking, immediately contact RM at 202-994-3265 for consultation.
- Coordinate with the GWU Project Manager and RM for the disposal/recycling of the ballasts:
  - For work on the Foggy Bottom Campus, and as determined by RM prior to the start of the planned work activity based on project size, duration, and location, PCB and No-PCB containing ballasts can be segregated for temporary storage into secondary containment units located behind the Support Building at 2025 F St, NW, Washington, D.C. For assistance and pick-up coordination, call Facilities Management at 202-994-6706.
  - For work on the Mount Vernon Campus (MVC), and as determined by RM prior to the start of the planned work activity based on project size, duration, and location, PCB and No-PCB containing ballasts can be segregated for temporary storage until ready for pick-up by the University’s hazardous waste handler. For assistance and pick-up coordination, call the MVC Operations Office at 202-242-6650.
  - For work on the Northern Virginia Campus, and as determined by RM prior to the start of the planned work activity based on project size, duration, and location, PCB and No-PCB containing ballasts can be segregated for temporary storage until ready for pick-up by the University’s hazardous waste handler. For assistance and pick-up coordination, call the Campus Operations Office at 703-276-3510.
  - As determined by RM, projects producing quantities of either PCB or No-PCB ballasts for disposal or recycling in excess of the temporary storage capabilities of the applicable campus may be approved for temporary storage on-site, in accordance with federal and local regulations.
  - Refer to Chapter 18 of the manual for more information on the transportation, handling, and disposal of hazardous waste.
  - Prior to transportation and disposal, waste manifests for materials meeting the definition of a hazardous waste, as defined by RCRA, must be signed by an approved representative of GWU.
  - If not handled through the University’s Hazardous Waste handler, waste must be sent to GWU approved facilities and copies of all disposal/recycling records including, but not limited to, waste manifests, Department of Transportation (DOT) shipping records, and recycling or disposal certificates must be forwarded to RM, in Suite 101 of the Support Building, no more than 30 days following the transportation, disposal, or recycling activity.

REGULATIONS
EPA 40 CFR 761, Toxic Substances Control Act (TSCA); and any other applicable regulations.

ACCOUNTIBILITY
Contractors will be responsible for complying with the above guidelines and for communicating the information to their employees and subcontractors. This includes the implementation of policies and procedures. All work shall be performed in accordance with all applicable laws and regulations.
Chapter 12
PERSONAL PROTECTIVE EQUIPMENT

PURPOSE
To inform contractors of their responsibilities under OSHA’s personal protective equipment standard while performing work at the University.

RESPONSIBILITIES
Contractors shall provide their employees with personal protective equipment including:

- **General Requirements.** (OSHA 1910.132)
  Protective equipment for eyes, face, head, and extremities, protective clothing, respiratory devices, and protective shields and barriers, shall be used wherever it is necessary by reason of hazards of processes or environment, chemical hazards, radiological hazards, or mechanical irritants encountered in a manner capable of causing injury or impairment in the function of any part of the body through absorption, inhalation or physical contact.

- **Eye and Face Protection.** (OSHA 1910.133)
  Each affected employee shall use appropriate eye or face protection when exposed to eye or face hazards from flying particles, molten metal, liquid chemicals, acids or caustic liquids, chemical gases or vapors, or potentially injurious light radiation.

- **Respiratory Protection.** (OSHA 1910.134)
  Each affected employee shall use appropriate respiratory protection when potentially exposed air contaminated with harmful dusts, fogs, fumes, mists, gases, smokes, sprays, or vapors and when such hazards cannot be reduced or eliminated by effective engineering controls.

- **Head Protection.** (OSHA 1910.135)
  Each affected employee shall wear protective helmets when working in areas where there is a potential for injury to the head from falling objects. Protective helmets shall also be worn to reduce electrical shock hazards when near expose electrical conductors which could contact the head.

- **Foot Protection.** (OSHA 1910.136)
  Each affected employee shall wear protective footwear when working in areas where there is a danger of foot injuries due to falling and rolling objects, or objects piercing the sole, and where such employee’s feet are exposed to electrical hazards.

- **Hearing Protection.** (OSHA 1910.95(K)(1)-(3))
  Each affected employee shall wear protective ear wear whenever noise exposures equal or exceed an 8-hour time-weighted average sound level (TWA) of 85 decibels and when engineering controls cannot reduce or eliminate the hazard.

- **Hand Protection.** (OSHA 1910.138)
  Each affected employee shall wear protective gloves when working in areas where hands are exposed to hazards such as those from skin absorption of harmful substances; severe cuts or lacerations; severe abrasions; punctures; chemical burns; thermal burns; and harmful temperature extremes.

- **Provide training to each employee who is required to use PPE.**
  Each affected employee must show understanding of training to their specific PPE. Contractors shall provide this training and upon completion, each employee shall be tested, and certified in writing by the trainer. If at any time the trained employee changes work activities requiring different PPE, or exhibits lack of understanding of the required PPE, the employee shall be retrained and re-certified.

REGULATIONS

ACCOUNTIBILITY
Contractors will be responsible for complying with the above guidelines and for communicating the information to their employees and subcontractors. This includes the implementation of policies and procedures. All work shall be performed in accordance with all applicable laws and regulations.
PURPOSE
To inform contractors of their responsibilities under the hazard communication policy regarding potentially hazardous materials present on University job-sites and in University buildings.

NOTIFICATION
The University is responsible for disclosing site-specific hazards to the contractor. Site-specific hazards may include the presence of chemical, radiological or biological materials. Disclosure of any site-specific hazards should occur prior to the solicitation process so any precautions to address the identified hazards can be taken into account.

RESPONSIBILITIES
Contractor shall:
- Maintain and have accessible copies of Material Safety Data Sheets (MSDSs) for hazardous chemicals brought onto University property.
- Before use, forward MSDSs of hazardous materials (that produce strong odors) to the Office of Risk Management for review.
- Maintain an effective hazard communication program.
- Use and store all hazardous or flammable chemicals, liquids, or gases brought onto the project site in approved containers conforming to applicable federal and local codes.
- Secure permits, if applicable, for the temporary storage of hazardous materials on the project site.
- Ensure that spills of hazardous materials are contained and cleaned-up immediately and that all necessary means and materials are maintained at the work site to accomplish this task.
- Notify the Project Manager immediately of a hazardous material spill.
- In the event the contractor encounters a hazardous material on the project site (i.e., asbestos, lead, PCBs), which has not been rendered harmless, the contractor shall report the condition to the project manager.

ACCESS TO MSDS’S
GWU will provide MSDS copies of all hazardous chemicals on site. MSDS information is available from three sources 24 hours a day:
- Office of Risk Management. (Normal Campus hours 8am-5pm) – (202) 994-3265.
- University Police Department. (After Hours 5pm-8am) – (202) 994-6111.
- University Police Department, Mount Vernon Campus. (After Hours 5pm-8am) – (202) 242-6111.

REGULATIONS

ACCOUNTIBILITY
Contractors will be responsible for complying with the above guidelines and for communicating the information to their employees and subcontractors. This includes the implementation of policies and procedures. All work shall be performed in accordance with all applicable laws and regulations.
Chapter 14
TRENCHING & EXCAVATIONS

PURPOSE
To inform contractors of their responsibilities while performing trenching and excavation operations at the University.

GENERAL
Excavations include, but are not limited to, operations such as drilling, digging and trenching.

RESPONSIBILITIES
Contractors shall apply the following safety controls:

- Before any excavation work begins, underground utilities shall be identified and the location marked of underground pipes, electrical conductors, gas lines or other structures.
- Evaluation is required of the trenching site by a "competent person" who knows and is trained to identify soil types, proper protective systems and hazardous conditions.
- Contact Miss Utility (1-800-257-7777) for procedures and notification requirements.
- Conduct a daily inspection of the excavation and the adjacent areas prior to work and as needed during the workday. If there are any unsafe conditions, work shall stop in the excavation and personnel removed until the problems are corrected.
- Monitor and recognize hazardous atmospheres and conditions such as vibration, external loads, weather conditions, ground water conditions and confined spaces.
- Check all protective material or equipment for any damage.
- When excavations are deeper than 4 feet, ladders or steps shall be located so that a worker does not need to travel more than 25 feet in the excavation before being able to exit. See (OSHA) confined space standard 29 CFR-1910.148 for testing before employees enter excavations greater than 4 feet in depth.
- Each employee in an excavation shall be protected from cave-ins by an adequate protective system designed in accordance with OSHA Standard 1926, Subpart P.
- Examination of the ground by a competent person for excavations less than five (5) feet in depth must present no indication of a potential cave-in hazard. If a cave-in hazard exists, protective systems are required.
- When excavations are deeper than five (5) feet, the sides shall be provided with a protective system (shored, braced or sloped sufficiently) to protect against hazardous ground movement.
- When heavy equipment will be operated nearby, the shoring or bracing shall be able to withstand this extra load regardless of the depth of the excavation. For any excavation that a person will enter, all dirt, debris and excavation material shall be effectively stored or retained at least two (2) feet from the edge of the excavation.
- Adequate protection from hazards associated with water accumulation should be in place before working in excavations.
- Signs and Barricades shall be displayed at all excavation/trenching sites.
- All excavations into which a person could fall or trip shall be guarded. While work is being performed in or near the opening, the guards surrounding the area shall be maintained.
- Barricades at least 3 to 5 feet high shall be spaced no further than ten (10) feet apart and yellow and black "Caution, Do Not Enter" construction tape shall be stretched securely between the barricades.
- A registered professional engineer shall design excavations more than twenty feet deep.
- Excavations should be covered and not left open overnight, whenever possible.

REGULATIONS
OSHA 29 CFR 1926, Subpart P, Trenching and Excavations; OSHA 29 CFR 1926.650-652, Excavation Requirements; and any other applicable regulations.

ACCOUNTABILITY
Contractors will be responsible for complying with the above guidelines and for communicating the information to their employees and subcontractors. This includes the implementation of policies and procedures. All work shall be performed in accordance with all applicable laws and regulations.
Chapter 15
MERCURY-CONTAINING LAMPS

PURPOSE
To inform contractors of their responsibilities when removing or replacing mercury-containing lamps at The George Washington University.

GENERAL
Much of the indoor and outdoor lighting at The George Washington University comes from fluorescent and high-intensity-discharge lamps, also known as mercury-containing lamps. Mercury-containing lamps will include all fluorescent and high-intensity discharge lights, bulbs, tubes, and lamps. Mercury-containing tubes will not be transported from one campus to the other. Each campus has at least one designated storage site.

RESPONSIBILITIES
Before undertaking any projects of repair, renovation or construction, that may require the disposal or recycling of mercury-containing tubes, contractors shall:

- Read and understand the University’s guidelines.
- Notify the GWU Project Manager, Facilities Management (FM) supervisor, or the Office of Risk Management (RM) of the project nature and duration prior to the start of the planned work activity.
- Plan to remove the light tubes from service and store in a manner sufficient to prevent unnecessary breakage.
- If tubes are broken, immediately contact RM at 202-994-3265 for consultation on clean-up and disposal in accordance with federal and local regulations.
- Coordinate with the GWU Project Manager, FM supervisor, and/or RM for the disposal/recycling of the tubes:
  - On the Foggy Bottom Campus, and as determined by RM prior to the start of the planned work activity based on project size, duration, and location, mercury-containing tubes can be temporarily stored in one of GWU’s designated Waste Mercury-Containing Lamp storage areas. For assistance and pick-up coordination, call Facilities Management at 202-994-6706.
  - For work on the Mount Vernon Campus (MVC), and as determined by RM prior to the start of the planned work activity based on project size, duration, and location, mercury-containing tubes can be segregated for temporary storage until ready for pick-up by the University’s hazardous waste handler. For assistance and pick-up coordination, call the MVC Operations Office at 202-242-6650.
  - For work on the Northern Virginia Campus, and as determined by RM prior to the start of the planned work activity based on project size, duration, and location, mercury-containing tubes can be segregated for temporary storage until ready for pick-up by the University’s hazardous waste handler. For assistance and pick-up coordination, call the Campus Operations Office at 703-276-3510.
  - As determined by RM, projects producing quantities of mercury-containing tubes for disposal or recycling in excess of the temporary storage capabilities of the applicable campus may be approved for temporary storage on-site, in accordance with federal and local regulations.
  - Refer to Chapter 18 of the manual for more information on the transportation, handling, and disposal of hazardous waste.
  - Prior to transportation and disposal, waste manifests for materials meeting the definition of a hazardous waste, as defined by RCRA, must be signed by an approved representative of GWU.
  - If not handled through the University’s Hazardous Waste handler, waste must be sent to GWU approved facilities and copies of all disposal/recycling records including, but not limited to, waste manifests, Department of Transportation (DOT) shipping records, and recycling or disposal certificates must be forwarded to RM, in Suite 101 of the Support Building, no more than 30 days following the transportation, disposal, or recycling activity.

Broken lamps should not remain on project sites for greater than one day unless otherwise approved by the Office of Risk Management. If lamps remain on project site for greater than one day, the site must be managed in accordance to the District of Columbia hazardous waste regulations.

REGULATIONS

ACCOUNTABILITY
Contractors will be responsible for complying with the above guidelines and for communicating the information to their employees and subcontractors. This includes the implementation of policies and procedures. All work shall be performed in accordance with all applicable laws and regulations.
Chapter 16

Red Tag Permit for Fire Suppression Systems

PURPOSE
To inform contractors of their responsibilities under the University’s Red Tag Permit Program.

RED TAG EVENTS
Projects of repair, renovation or construction often require the disabling or alteration of automatic sprinkler and other fire safety systems. The Red Tag Permit Program is a system approved by GWU and designed as a method of managing life safety (i.e. sprinkler system) impairments in University buildings in the event the systems must be temporarily taken out of service for repairs or replacement.

RESPONSIBILITIES
Before undertaking any projects of repair, renovation or construction, that may require the disabling or alteration of a sprinkler system in a University building, contractors shall:

- Plan to utilize temporary protection (i.e. fire extinguishers or charged lines).
- Restrict all Hot Work in the affected area.
- On the Foggy Bottom Campus, contact the GWU Facilities Management Emergency Minor Maintenance Office at 202-994-6706 to obtain a Red Tag Permit. The Life Safety Office Supervisor or authorized employee will:
  - Immediately notify the Office of Risk Management.
  - Fill out the approved Red Tag Permit, following all instructions, and forward a copy to the Office of Risk Management prior to any work activity.
  - Place the "FIRE PROTECTION OUT OF SERVICE" tag on the isolated system.
  - Promptly restore fire protection equipment to automatic service following completion of work.
  - Conduct any tests to ensure the system has been fully recharged.
  - Lock the system back open.
  - Reset any notification systems (i.e. alarm systems).
  - Complete the Red Tag and immediately notify RM of the project completion.
- For work on the Mount Vernon Campus, contact the campus Operations Office at 202-242-6650 and the Office of Risk Management at 202-994-3265 prior to any outages to obtain a Red Tag Permit.
- For work on the Northern Virginia Campus, contact the campus Operations Office at 703-726-3510 and the Office of Risk Management prior to any outages to obtain a Red Tag Permit.

ACCOUNTABILITY
Contractors will be responsible for complying with the above guidelines and for communicating the information to their employees and subcontractors. This includes the implementation of policies and procedures. All work shall be performed in accordance with all applicable laws and regulations.
PURPOSE
To inform contractors of their responsibilities under the University’s Power Tool Safety Program to ensure the safe working condition of tools and equipment.

ACTIVITIES
Each contractor shall be responsible for the safe working condition of tools and equipment used by its employees, which may include but are not limited to hand and portable power tools and other hand-held equipment.

RESPONSIBILITIES
Prior to performing activities related to repair, renovation, or construction projects, contractors shall eliminate or minimize any potential unsafe tools or equipment by implementing the following procedures:

- Each employer shall be responsible for the safe condition of tools and equipment used by its employees.
- Tools shall be inspected at regular intervals and shall be repaired in accordance with the manufacturers’ specification.
- Before using a tool, the operator shall inspect it to determine that all operating moving parts operate and that it is clean.
- Power tools shall be maintained in accordance with the manufacturer’s specifications.
- Appropriate personal protective equipment should be worn due to hazards that may be encountered while using portable power tools and hand tools.
- Tools should only be used for their intended purposes.
- All employees should receive instruction on regulations and the safe use of each power tool.
- Owners’ manuals including manufacturer’s specifications and suggested work practices should be kept on-file and made available upon request to all employees required to use the equipment.

REGULATIONS

ACCOUNTABILITY
Contractors will be responsible for complying with the above guidelines and for communicating the information to their employees and subcontractors. This includes the implementation of policies and procedures. All work shall be performed in accordance with all applicable laws and regulations.
PURPOSE
To inform contractors of their responsibilities under the University’s Hazardous Waste Management Program (HWMP) when handling, storing, transporting, and disposing of hazardous wastes generated at the University.

GENERAL
With the enactment in 1976 of the Resource Conservation and Recovery Act (RCRA), the transportation, handling, storage and disposal of hazardous wastes became regulated under federal, state and local laws. The Environmental Protection Agency (EPA) and the local jurisdictions have developed regulations for compliance with RCRA. Responsibility for compliance with hazardous waste regulations begins with the person generating the waste material and follows through to disposal.

RCRA defines a hazardous waste as a solid waste that because of its quantity, concentration, physical, chemical, or infectious characteristics may cause or significantly contribute to an increase in serious, irreversible, or incapacitating reversible illnesses or pose a substantial, present or potential hazard to human health, safety, or welfare to the environment when improperly treated, stored, transported, used, disposed of or otherwise managed. Examples of hazardous wastes associated with the construction industry include, but are not limited to: adhesives, cements, lubricants, spill residues, used oil, cleaning supplies, solvents, paints, paint thinners, and empty cylinders.

RESPONSIBILITIES
Prior to performing activities related to repair, renovation, or construction projects potentially impacting or generating hazardous waste, contractors shall:

- Identify any potential hazardous wastes associated with the planned work activity.
- Implement their own Hazardous Waste Program.
- Implement their own employee training program for the specific materials identified in compliance with local and federal regulations.
- Contact the Office of Risk Management at 202-994-3265 regarding the transportation, handling, storage, and disposal of all solid and hazardous wastes potentially generated as part of the proposed work activities.
- Ensure no wastes are abandoned in place.
- Notify the Office of Risk Management prior to the transportation, handling, storage and disposal of all solid and hazardous wastes potentially generated as part of the proposed work activities.
- Comply with all local and federal regulations and the University’s HWMP.
- Confirm that all wastes removed from GWU owned properties are transported to and disposed of or recycled at GWU approved facilities. A list of pre-approved facilities can be obtained from the Office of Risk Management during normal business hours.
- Prior to transportation and disposal, waste manifests for materials meeting the definition of a hazardous waste, as defined by RCRA, must be signed by an approved representative of GWU.
- Forward copies of all transportation, handling, storage, and disposal records including but not limited to Hazardous Waste Manifests, DOT Permits, and Disposal or Recycling certificates to the Office of Risk Management.

REGUALTIONS
EPA 40 CFR 260-273, Standards for Universal Waste Management; 20A DCMR Chapters 40-54, District of Columbia Municipal Regulations; Virginia Hazardous Waste Regulations; and any other applicable regulations.

ACCOUNTABILITY
Contractors will be responsible for complying with the above guidelines and for communicating the information to their employees and subcontractors. This includes the implementation of policies and procedures. All work shall be performed in accordance with all applicable laws and regulations.
Chapter 19 Electrical Safety

PURPOSE
To inform contractors of their responsibilities when performing work activities that may impact electrical systems on University property.

ACTIVITIES
Construction activities frequently impact electrical systems as part of the planned work activity. Such activities include, but are not limited to:

- Installation of electrical systems, components, machinery, and equipment.
- Alterations of electrical systems, components, machinery, and equipment.
- Maintenance of existing systems and equipment.
- Demolition of existing systems.
- Temporary planned outages.
- Tests and diagnostics.

RESPONSIBILITIES
Prior to performing activities related to repair, renovation, or construction projects potentially impacting electrical system components and energized or non-energized machinery, equipment, parts, or systems, contractors shall:

- Identify any potential sources of electrical energy likely to cause death, injury, or serious physical harm.
- Notify the GWU Project Manager of impact activities prior to the start of work.
- Coordinate planned outages with GWU Facilities Management department through the GWU Project Manager. On the Foggy Bottom Campus call 202-994-6706; on the Mount Vernon Campus call 202-242-6650; and on the Northern Virginia Campus call 703-726-3510.
- Ensure all employees performing impact activities have received sufficient training in compliance with federal and local regulations.
- Ensure all employees are provided adequate personal protective equipment as required by regulations.
- Ensure all work is performed in accordance with the guidelines of federal and local regulations listed below.
- Ensure all affected employees, contractors, staff, faculty, and students are notified through the GWU Project Manager prior to impacting building electrical systems.

REGUALTIONS

ACCOUNTABILITY
Contractors will be responsible for complying with the above guidelines and for communicating the information to their employees and subcontractors. This includes the implementation of policies and procedures. All work shall be performed in accordance with all applicable laws and regulations.
Chapter 20  Bloodborne Pathogens

PURPOSE
To inform contractors of their responsibilities regarding employee exposure to Bloodborne Pathogens (BBP).

ACTIVITIES
The Occupational Safety and Health Administration (OSHA) defines work related exposure to potential Bloodborne Pathogens as reasonably anticipated skin, eye, mucous membrane, or parenteral contact with blood or other potentially infectious materials that may result from the performance of an employee’s duties. Construction related work activities such as repair work and renovation projects create an environment where serious injuries are likely to occur, and thus the exposure to BBP.

RESPONSIBILITIES
Prior to allowing employees access to job sites where work activities related to repair, renovation, or construction projects are completed, contractors shall:

- Identify any potential work activities likely to cause injury, or serious physical harm.
- Establish a written Exposure Control Plan designed to eliminate or minimize potential employee exposure in accordance with federal and local regulation, containing the following elements:
  - Employee exposure determinations.
  - The schedule and method for plan implementation.
  - The procedure for the evaluation of circumstances surrounding exposure incidents.
  - The Exposure Control Plan must be accessible to all employees.
  - The Exposure Control Plan must be reviewed at least annually.
  - The Exposure Control Plan must be evaluated by employees potentially exposed to injuries, blood, or other potentially infectious materials.
- Universal precautions shall be observed to prevent contact with blood or other potentially infectious materials. Under circumstances in which differentiation between body fluid types is difficult or impossible, all body fluids shall be considered potentially infectious materials.
- Engineering and work practice controls shall be used to eliminate or minimize employee exposure. Where occupational exposure remains after institution of these controls, personal protective equipment shall also be used.
- Ensure all employees have received sufficient training in compliance with federal and local regulations.
- Ensure all employees are provided with adequate personal protective equipment as required by regulations.

REGUALTIONS
OSHA 29 CFR 1910.1030, Bloodborne Pathogens Standard; and any other applicable regulations.

ACCOUNTABILITY
Contractors will be responsible for complying with the above guidelines and for communicating the information to their employees and subcontractors. This includes the implementation of policies and procedures. All work shall be performed in accordance with all applicable laws and regulations.
Chapter 21
Powered Industrial Lift Trucks

PURPOSE
To inform contractors of their responsibilities under the University’s Industrial Lift Truck Program involving the operation and maintenance of applicable vehicles.

ACTIVITIES
Powered Industrial Lift Trucks include but are not limited to: fork trucks, tractors, platform lift trucks, motorized hand trucks, and other specialized industrial trucks powered by electric motors or internal combustion engines.

RESPONSIBILITIES
Prior to allowing employees access to job sites where industrial lift trucks are used, contractors shall ensure:

• Vehicles are inspected daily.
• Employees obey all safe operating procedures.
• Any power-operated industrial truck not in safe operating condition shall be removed from service.
• All repairs shall be made by authorized personnel.
• All parts of any such industrial truck requiring replacement shall be replaced only by parts equivalent to those used in the original design.
• No person shall be allowed to stand or pass under the elevated portion of any truck, whether loaded or empty.
• Unauthorized personnel shall not be permitted to ride on powered industrial trucks.
• Operators will sound the horn and use extreme caution when meeting pedestrians, making turns, and traveling through doors.
• When loading trailers, dock plates will be used. Operators will assure dock plates are in good condition and will store on edge when not in use.
• Operators are instructed to report all accidents, regardless of fault and severity.
• All employees are trained in the operation and handling in accordance with federal and local regulations.

REGULATIONS
OSHA 29 CFR 1910.178, Powered Industrial Trucks; and any other applicable regulations.

ACCOUNTABILITY
Contractors will be responsible for complying with the above guidelines and for communicating the information to their employees and subcontractors. This includes the implementation of policies and procedures. All work shall be performed in accordance with all applicable laws and regulations.
PURPOSE
To inform contractors of their responsibilities when they work on any fuel-burning equipment at the University to ensure the University remains in compliance with applicable environmental regulations.

ACTIVITIES
The installation, replacement, or removal of a piece of fuel-burning equipment (i.e., boilers, chillers, emergency generators, water heaters, or dryers burning gasoline, oil, or natural gas, other than natural-gas fired stoves used for cooking or very small laboratory sources such as table-top burners) at the University must be reported to Facilities Management at least three weeks prior to performing the work. A permit is required by the DC Department of Health (DOH) for these activities, which is issued separately from construction permits issued by the DC Department of Consumer and Regulatory Affairs (DCRA).

RESPONSIBILITIES
- All projects involving any aspect of fuel-burning equipment as listed above must be approved by the Facilities Management Energy and Environmental Office at 202-994-6067, at least three weeks prior to the start date.
- Contractors will be held responsible for obtaining DCRA and DOH permits. GWU will not permit the project to proceed until a DOH permit is obtained.
- In the event of an emergency situation, the University will request the applicable DCRA or DOH permits on the contractor’s behalf to expedite the process.
- The contractor shall provide a description of the equipment including the unit’s make, model, serial number (if known), fuel burned, fuel burn rate, and known exhaust characteristics as required by the DOH permit application.
- The contractor, in coordination with the project engineers, construction managers, and/or manufacturers of the unit must provide a manufacturer’s “cut-sheet” documenting this information before a unit is placed into service.
- In the event a piece of equipment is installed under emergency conditions, the information listed above must be provided no more than 15 calendar days after the installation.
- Contractors should provide the information listed above to the University project manager, who in turn will forward it to Facilities Management.
- Facilities Management will return the DOH permit to the University project manager.

If the University is fined for non-compliance with these regulations, the University department managing the project or activity is expected to pay the fine, and that University department may seek retribution from the contractor(s) involved.

REGULATIONS
EPA 40 CFR 70; and Chapter 3 of Title 20 of the District of Columbia (DC) Municipal Regulations (DCMR).

ACCOUNTABILITY
Contractors will be responsible for complying with the above guidelines and for communicating the information to their employees and subcontractors. This includes the implementation of policies and procedures. All work shall be performed in accordance with all applicable laws and regulations.
PURPOSE
To inform contractors of their responsibilities when they work with any equipment containing refrigerants at the University to ensure the University remains in compliance with applicable environmental regulations.

ACTIVITIES
The installation, maintenance, service, repair, or disposal of equipment containing more than 50 pounds of refrigerant by a contractor must be reported to Facilities Management. The U.S. Environmental Protection Agency (EPA) requires the University maintain an accurate inventory of all such equipment, including the date it went into or out of service, the type and amount of refrigerant it contains, and the rate at which refrigerant may leak from the equipment.

RESPONSIBILITIES
- All projects involving any aspect of equipment containing refrigerants as listed above must be approved by the Facilities Management Energy and Environmental Office at 202-994-6067.
- Contractors must provide the location and description of the equipment worked on including the unit’s make, model, serial number, refrigerant type, amount of refrigerant added or removed, nature of their work, date their work was performed.
- All work must be performed by certified technicians who hold applicable, up-to-date certification cards.
- Contractors must provide a copy of the refrigerant certification cards for the technicians who performed the work.
- Each contractor must provide this information to the University project manager prior to the start of any scheduled work activity, who in turn will forward this information to Facilities Management.
- Refer to Chapter 18 of the manual for more information on the transportation, handling, and disposal of hazardous waste.
- Prior to transportation and disposal, waste manifests for materials meeting the definition of a hazardous waste, as defined by RCRA, must be signed by an approved representative of GWU.
- If not handled through the University’s Hazardous Waste handler, waste must be sent to GWU approved facilities and copies of all disposal/recycling records including, but not limited to, waste manifests, Department of Transportation (DOT) shipping records, and recycling or disposal certificates must be forwarded to RM, in Suite 101 of the Support Building, no more than 30 days following the transportation, disposal, or recycling activity.

If the University is fined for non-compliance with these regulations, the University department managing the project or activity is expected to pay the fine, and that University department may seek retribution from the contractor(s) involved.

REGULATIONS
EPA 40 CFR 82; and Chapter 3 of Title 20 of the District of Columbia (DC) Municipal Regulations (DCMR).

ACCOUNTABILITY
Contractors will be responsible for complying with the above guidelines and for communicating the information to their employees and subcontractors. This includes the implementation of policies and procedures. All work shall be performed in accordance with all applicable laws and regulations.
PURPOSE
To inform contractors of their responsibilities when they install, remove, or work with any equipment containing oil at the University to ensure compliance with applicable environmental regulations.

ACTIVITIES
Installation or removal of oil-containing equipment by a contractor must be reported to Facilities Management. The U.S. Environmental Protection Agency (EPA) and District of Columbia Department of Health (DC-DOH) requires the University maintain an accurate inventory of all such equipment, including the date it went into or out of service and the type and amount of oil it contains. Oil includes fuel oil used in generators; heating oil used in boilers; hydraulic oil used in elevators, compactors, and wheelchair or dock lifts; and oil and grease waste from kitchens. The District of Columbia Fire Department (DCFD) regulates installations of aboveground storage tanks (ASTs) while installations of underground storage tanks (USTs) are regulated by DC-DOH, with some input from DCFD. Removal of ASTs and USTs are regulated by both DC-DOH and DCFD.

RESPONSIBILITIES
- All projects involving oil-containing equipment as listed above must be reported to the Facilities Management Energy and Environmental Office at 202-994-6067.
- Contractors must provide the location and description of the equipment installed or removed, the nature of their work, and the date(s) their work was performed.
- Each contractor must provide this information to the University project manager prior to the start of any scheduled work activity, who in turn will forward this information to Facilities Management.
- Contractors must have AST installations approved by the DCFD.
- Contractors must have UST installations approved by the DC-DOH and DCFD.
- Contractors must have AST and UST removals approved by the DC-DOH and DCFD.
- Refer to Chapter 18 of the manual for more information on the transportation, handling, and disposal of hazardous waste.
- Prior to transportation and disposal, waste manifests for materials meeting the definition of a hazardous waste, as defined by RCRA, must be signed by an approved representative of GWU.
- If not handled through the University’s Hazardous Waste handler, waste must be sent to GWU approved facilities and copies of all disposal/recycling records including, but not limited to, waste manifests, Department of Transportation (DOT) shipping records, and recycling or disposal certificates must be forwarded to RM, in Suite 101 of the Support Building, no more than 30 days following the transportation, disposal, or recycling activity.

If the University is fined for non-compliance with these regulations, the University department managing the project or activity is expected to pay the fine, and that University department may seek retribution from the contractor(s) involved.

REGULATIONS
EPA 40 CFR 112 and 40 CFR 280-281; Subtitle F, Chapters 55 through 70, of Title 20 of the District of Columbia (DC) Municipal Regulations (DCMR); and Industrial Standards including BOCA, NFPA, and API.

ACCOUNTABILITY
Contractors will be responsible for complying with the above guidelines and for communicating the information to their employees and subcontractors. This includes the implementation of policies and procedures. All work shall be performed in accordance with all applicable laws and regulations.
Chapter 25 | Noise

PURPOSE
To inform contractors of their responsibilities regarding noise to ensure the University remains in compliance with applicable regulations.

ACTIVITIES
There are several different types of rules regarding noise for contractors to be mindful of as follows:

- OSHA regulations regarding noise;
- District of Columbia regulations regarding noise; and
- GWU policies regarding noise.

OSHA noise standards consist of a two-stage program:

- A hearing conservation program must be implemented when employees are exposed to 85 dB or more in an 8-hour day. These programs include annual audiometric testing and require hearing protection devices, such as earplugs.
- Engineering or administrative noise controls are required when exposure exceeds 90 dB. Engineering controls include redesigning the space to reduce machinery noise, replacing machinery with quieter equipment, enclosing the noise source or enclosing the noise receiver. Administrative controls include mandating the length of time an employee can be exposed to a particular noise source.

DC regulations state in part that construction or demolition can be performed only during the hours of 7:00 am through 7:00 pm on weekdays, and the generated noise cannot exceed 80 dB except for pile driving. Noisy maintenance activities can be performed outside these hours. Generally, a plan for how a contractor will comply with these regulations is required prior to issuance of the construction permit.

GWU may impose additional time limitations on particular projects expected to make noise such as not starting work until after 9:00 am where work is performed near dormitories when school is in session.

RESPONSIBILITIES
Contractors must protect their own workers in accordance with OSHA regulations; the public by obeying the DC regulations; and GWU polices related to noise.

If the University is fined for non-compliance with these regulations, the University department managing the project or activity is expected to pay the fine, and that University department may seek retribution from the contractor(s) involved.

REGULATIONS

ACCOUNTABILITY
Contractors will be responsible for complying with the above guidelines and for communicating the information to their employees and subcontractors. This includes the implementation of policies and procedures. All work shall be performed in accordance with all applicable laws and regulations.
CHAPTER 26
RADIATION SAFETY

PURPOSE
To inform contractors of their requirements to follow all radiation safety rules applicable to radioactive material and radiation sources at the University, including policies of the Radiation Safety Office, NRC and D.C. regulations and conditions of the licenses issued to the University, and directions of the Radiation Safety Officer regarding the contractor’s activities.

RADIATION SUMMARY
University faculty and their staff use licensed radioactive materials daily, with careful regard to safety. Each use requires review and approval by the Radiation Safety Committee. All areas where radiation sources are used or stored are duly posted with caution signs. The University insists that contractors and their employees use the same attention to radiation safety that our employees do, so as to keep radiation exposure “as low as reasonably achievable” (ALARA).

RESPONSIBILITIES
At least three days prior to proceeding with any repair or renovation of a University facility that houses radioactive material, or proceeding with any use of a radiation source either for imaging the structure of a University facility or for any other purpose, and three days prior to contractor access to a University radiation area or source, the contractor shall:

- Implement and enforce any policies and procedures necessary to complete the contracted project with full attention to the safety of all University faculty, staff, students, visitors, and contractor employees.
- Provide the GWU Contract Manager sufficient information to allow the Radiation Safety Officer to review the radiation safety aspects of the contracted project.
- For structural imaging or testing, this information must include:
  - The scope and schedule of the work.
  - The location, direction, and exposure duration of the irradiation.
  - The strength and other major properties of the radiation source.
  - The means for providing uninterrupted security for the radiation source, and definitive surveillance for the areas surrounding the radiation field.
  - Any other information requested upon review.
- For any use of radiation, the information must include:
  - The registration, license, and license application required for the use of radiation.
  - A written and drawn description of the work to be done.
  - Any other information requested upon review.
- For work near a University radiation source, the contractor must provide a plan and stay-time estimate.
- For work on any chemical hood, bio-safety cabinet, sink or other equipment labeled with the radiation warning symbol, “Caution Radioactive Material,” or “Hot Sink,” the information must include:
  - The location (building and room number) and the specific hood, cabinet, sink, or other equipment.
  - The planned work to be performed.

REGULATIONS
U.S. Nuclear Regulatory Commission, 10 CFR Parts 19, 20, 21, 30, 33, 34, 36, 40, & 71; Department of Transportation, 49 CFR, Subchapter C; Environmental Protection Agency regulations and statutes; the District of Columbia Municipal Code; and any other applicable regulations.

ACCOUNTABILITY
Contractors will be responsible for complying with the above guidelines and for communicating the information to their employees and subcontractors. This includes the implementation of policies and procedures. All work shall be performed in accordance with all applicable laws and regulations.