

University of Delaware Contractor Safety Advisory

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INTRODUCTION

This Advisory contains an overview of selected health and safety good practices and regulatory requirements that Contractors may conclude to be applicable to their work at the University of Delaware. It should be considered as an introduction and not a substitute for a thorough understanding of the subjects. Furthermore, it is for informational purposes only. This Advisory does not relieve the Contractor of its obligations to (1) control the manner and means by which it and its employees, subcontractors and agents perform work or services at The University of Delaware, and (2) independently ascertain what health and safety practices are appropriate and necessary for the performance of such work or services. Contractors are expected to be familiar with and follow appropriate health and safety practices, including those required by the Federal Occupational Safety and Health Administration (OSHA) regulations, as well as any applicable state or local codes. And University of Delaware policies and procedures. (Additional information about OSHA's requirements can be found at their web site, www.osha.gov).

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General Standard Rules While Working on University of Delaware Campus

1. **Sexual Harassment:** Is a clear violation of the owner's policy and it is illegal and is considered a form of discrimination, covered under Title VII of the Civil Rights Act of 1964.
2. Normal working hours shall be 7:00 am to 3:30 pm, Monday through Friday. Work creating noise near or in Residence Halls shall start after 8:30 am. If needed, University of Delaware will stipulate different work hours prior to starting a project.
3. Contractors shall park in approved areas.
4. All accidents (injuries/illness) and near misses, whether injurious or not, and hazardous conditions shall be reported to the Project Manager immediately.
5. Contractors shall familiarize themselves prior to commencing any project with the location of fire extinguishers, eye-wash stations, safety cabinets, safety blankets, safety showers, emergency exits, emergency phones, etc. in case an emergency arises during construction. Emergency exits and corridors shall not be blocked or obstructed. If work requires that exits/corridors be blocked, a review by OCCUPATIONAL HEALTH AND SAFETY shall be conducted prior to work commencing.
6. Use signs, signals, and barriers to convey the areas of construction where specific safety precautions and requirements are necessary. This shall be in conformance to OSHA Standards **29 CFR – 1926 – Subpart G – Signs, Signals, and Barricades**. A University setting can be unique as a construction site because students can be active at unconventional times. Additional steps to barricade and limit to restrict access may be necessary.
7. Contractors shall submit MSDS sheets and outlines of procedures to be employed in using these materials prior to commencing any work. A copy of all MSDS sheets and right to know sign-off sheets shall be maintained at the construction site.
8. **STAKE-OUTS:** Notify USP (Miss Utility) two days and no more than 10 days prior to proposed excavation. Accurately identify areas and provide information including data as listed in the "**Facilities Stakeout Procedure**". Follow the aforementioned Procedure for normal and emergency stakeouts.
9. **SMOKING:** Smoking is **not permitted** in any building or structure.
10. **IMPORTANT NUMBERS:**

Emergencies (from UD Phone)	9-911
Emergencies (call direct from Blue Light Phone)	
Emergencies (from Non UD Phone)	911
Public Safety	302-831-2222

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Operations Center/Dispatch	302-831-1141
Occupational Health & Safety	302-831-8475
Facilities Planning & Construction	302-831-1744
Facilities Management	302-831-4918
USPCD (Miss Utility)	800-282-8555

11. **PERMITS/AUTHORIZATIONS:** Proper authorizations and/or current permits are required before you may begin work. Permits shall be posted at the worksite when required. Permits and authorizations commonly required for work on a site listed below (others may be needed).
1. Facilities Stake out procedure (Procedure)
 2. University of Delaware “Code of Conduct” (Procedure)
 3. Confined space entry permit (Authorization)
 4. Hot work permits (Permit/Tag)
 5. Scaffold tags (Tag)
 6. Hazard Communications (Form)
 7. Lock out/Tag out (Tag/Process)
 8. University of Delaware first report of injury (Form)
 9. Trenching (Form)
 10. Work place violence prevention (Program)
12. Shirts and long pants must be worn at all times while on the facility. Other attire must be neat, and appropriate for the type of work being performed. All Contractors and their employees shall wear clothing that identifies their company, e.g. embroidered names on shirts, hats, jackets, etc., same color. Note: Nametags are not acceptable.
13. Radios for providing music or other entertainment are not permitted on construction projects.

General Duty Clause

Where OSHA has not promulgated specific standards to address a given situation, it may rely upon a *general duty clause* in the OSHA Act for the issuance of citations or fines. OSHA interprets this general duty clause (29 U.S.C.654(a)) to give it authority to, in appropriate instances, cite a contractor for hazards to which employees of other contractors are exposed. Selected specific OSHA regulations which may be applicable to a Contractor’s work on a University project are referenced below. **(Please note that this is a representative, not an exhaustive list. In all instances, it is the Contractor’s obligation to identify the OSHA standards or regulations that are applicable, and to be guided accordingly.)**

Personal Protective Equipment

Personal protective equipment (PPE) is used to increase individual safety while performing potentially hazardous tasks, and may include safety glasses, hard hats, gloves, respirators, or any equipment or clothing used to protect against injury or illness. Contractors shall ensure that the

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proper types of PPE are available for and used by their employees. OSHA's requirements are found in **29 CFR 1926 Subpart E – Personal Protective Equipment**.

Barricades and Fencing

Barricades act as warning devices, alerting others of the hazards created by construction activities, and shall be used to control traffic, both vehicular and pedestrian, safely through or around the work site. Contractors should use barricades as required in **29 CFR 1926 Subpart G – Signs, Signals, and Barricades**, or wherever necessary for the physical protection of people or property. Temporary cyclone fencing, plastic safety fencing and portable manhole barricades are examples of acceptable barricading. Yellow caution tape and/or cones are not considered acceptable barricades, and shall be used only until more suitable barricades can be erected. Signage and illumination should be used where appropriate.

Excavations (including Trenches)

Before excavation work begins, the Contractor shall be familiar with and follow the regulations found in **29 CFR 1926 Subpart P – Excavations**.

Scaffolding

In its simplest form, a scaffold is any temporary elevated or suspended work surface used to support workers and/or materials. There are many types of scaffolds, both supported and suspended. Contractors who erect or use scaffolding shall be familiar with and follow the requirements of **29 CFR 1926 Subpart L – Scaffolds**.

Fall Protection

When work is performed on elevated surfaces that are six feet or more above the surrounding area protection against falls frequently shall be implemented. Fall arresting systems, which include lifelines, body harnesses, and other associated equipment, are often used when fall hazards cannot be controlled by railings, floors, nets, and other means. These systems are designed to stop a free fall of up to six feet while limiting the forces imposed on the wearer. Contractors shall be familiar with and follow the requirements **29 CFR 1926 Subpart M – Fall Protection**.

A variety of systems are available to provide fall protection. Contractors shall analyze the work site, the potential hazards and the magnitude of possible injury to workers in assessing fall protection systems shall be used.

Hot Work (See Specific University Policies and Procedures)

Cutting and welding operations (referred to as hot work) are commonly associated with construction activities. Hot work equipment, which may produce high voltages or utilize compressed gases, requires special awareness and training on the part of the worker to be used safely. Contractors shall control the hazards associated with hot work through the

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implementation of effective programs presented under **29 CFR 1926 Subpart J – Welding and Cutting**.

Hot Work Permits: Hot work permits serve as a checklist for operators and those performing fire watch duties. The Contractor responsible for issuing permits shall be qualified to examine the work site and ensure that appropriate protective steps, such as those listed in this section, have been taken.

Fire Watch: A person other than the operator shall perform fire watch duties and remain at the work site for at least one (1) hour per state code after hot work operations have ended. Additionally, the following steps should be taken:

- A fire extinguisher rated at not less than 2-A:10-B:C shall be attached to all portable cutting and welding carts.
- If a building or area is equipped with a sprinkler system, then that system shall be operational when hot work is performed.
- A hot work permit is required for all operations involving open-flame or work producing heat and/or sparks.

Confined Spaces (See Specific University Policies and Procedures)

A confined space is defined as any space that is large enough to enter and perform work, has a limited means of entry or egress (exit), and is not designed for continuous employee occupancy. Examples of confined spaces include pits, tanks, certain tunnels, manholes and underground vaults.

Contractors shall be familiar with relevant portions of **29 CFR 1926 Subpart C – General Safety and Health Provisions**, and use appropriate entry procedures when working in confined spaces.

When a confined space entry includes hot work (welding or cutting), the additional procedures from **29 CFR 1926 Subpart J – Welding and Cutting** shall be followed.

Lockout/Tagout

Lockout/tagout procedures are designed to prevent accidental startup of machines or equipment, and to prevent the release of stored energy. Through the application of locks and/or tags as direct controls, equipment is isolated from energy sources and injuries to workers are prevented. **When work affects or is done in association with University personnel, Contractor's shall submit their lockout/tagout procedures to the University's Project Manager.**

Contractors shall, at a minimum, adhere to the following procedures found in **29 CFR 1926 Subpart K – Electrical:**

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Controls: Controls that are to be deactivated during the course of work on equipment or circuits shall be locked or tagged.

Equipment and Circuits: Equipment or circuits that are de-energized shall be rendered inoperative and shall have tags attached at all points where the equipment or circuits could be re-energized.

Tags: Tags shall be placed to identify plainly the equipment or circuits being worked on.

Electrical Safety

All contractors and their personnel must be familiar with **29 CFR Subpart K – General Electrical**. This standard covers four major divisions: installation safety requirements, safety related work practices, safety-related maintenance and environmental conditions and safety requirements for special equipment. Some specific examples include: daily inspection of extension cords and GFCI requirements.

Exposure Monitoring

Potential exposure includes, but is not limited to, nuisance dust, chemical vapors, hazardous materials (such as lead) and noise. The Contractor shall take all necessary precautions to control or contain fugitive emissions from the job site.

- Employee exposure to airborne hazardous substances must be maintained below OSHA permissible exposure limit (PEL), found in **29 CFR 1910.1000 Table Z**, or American Conference of Governmental Industrial Hygienists (ACGIH) threshold limit value (TLV) for any chemical.
- Where engineering controls will not adequately control exposures or are not feasible, and the potential exists to create air concentrations in the work area above
- the PEL or TLV, work area exposure conditions shall be monitored. Monitoring should occur, at a minimum, during the start of work and whenever there is a change in procedure, process, or chemical or material used.

Asbestos

Asbestos was incorporated in a number of widely used products, many of which were used in building construction from the late 1800's and the mid-1980's, when most University buildings were constructed. The most common use of asbestos in the University buildings was in floor tiles, mastic, thermal systems insulation (TSI), plaster, ceiling tiles, structural steel fireproofing and acoustical and decorative plaster. Per the OSHA Asbestos Standard (**29 CFR 1926.1101**) building materials installed prior to 1980 shall be presumed to contain asbestos unless historical information or testing indicates otherwise.

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- Contractors employed by the University to perform building or facilities-related maintenance, repair or renovation shall be provided the location of suspect and known asbestos-containing materials (ACM) in the work area(s) to which they are assigned.
- Contractors shall, under no circumstances, damage or disturb known or suspect ACM (unless they are a licensed Asbestos Abatement Contractor and have been specifically employed to perform asbestos repair or removal). If in the course of the work, suspected asbestos materials are discovered, the contractor shall stop work that might disturb the material immediately and notify the Project Manager.
- It is the responsibility of the Contractor to provide its employees with an asbestos awareness program, which shall include, but not be limited to the information contained in this section and appropriate federal and Delaware regulations.

Lead

Many buildings built or renovated before 1978 have lead-based paint applied to some interior or exterior surfaces. Paint containing 0.5 percent or more lead by weight or 1 mg/cm² or more lead by x-ray fluorescence is considered to be lead paint.

- Contractors employed by the University will be provided the location of known lead-containing building materials in the work area(s) to which they are assigned.
- Contractors that disturb lead paint during the course of work shall ensure all work is in compliance with the **29 CFR 1926.62, Lead**, including controlling exposures below the permissible exposure limit and providing biological monitoring for employees, as needed.
- Contractors that disturb lead-based paint during the course of work shall take all necessary precautions to protect University employees, students and visitors from exposure to lead dust or contamination. Such measures may include but are not limited to, using plastic sheeting to isolate the work area, using wet techniques, washing with tri-sodium phosphate, and/or using a HEPA vacuum.
- Where the work area is an area normally occupied or frequently visited by children under 6 years old or pregnant women, University of Delaware Occupational Health and Safety shall be contacted after the work area has been cleaned to perform clearance testing. The Contractor shall continue cleaning efforts until sampling results indicate the lead dust levels are less than or equal to 100 micrograms per square foot on floor surfaces and less than or equal to 250 micrograms per square foot on interior window sills, as appropriate.
- Contractors employed to provide abatement of a lead paint hazard shall be licensed by the State of Delaware to provide such services. All work shall be performed in accordance with applicable state and federal regulations.
- In many cases, lead paint chips are considered hazardous waste by the U.S. Environmental Protection Agency. Contractors shall ensure that wastes containing lead paint, including

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paint chips, are disposed in accordance with federal and state regulations. All hazardous waste generated from University facilities must be disposed in accordance with federal and state regulations. All hazardous waste generated from University facilities must be disposed of by contacting University of Delaware Occupational Health and Safety at (302) 831-8475.

Indoor Air Quality

Maintaining Indoor Air Quality while construction occurs in an occupied building requires pre-planning by all parties. This includes the designers, contractors, construction managers, Occupational Health and Safety and the occupants. Methods to maintain air quality include but are not limited to: containing the work area, modifying HVAC operation, reducing emissions, increasing housekeeping, rescheduling work hours and relocating occupants. Refer to the backside of the Hazard Communication Form.

Hazard Communication

Chemicals Stored or Used by the University of Delaware

Chemicals are used extensively at the University of Delaware, including, but not limited to, laboratories, maintenance activities, and janitorial work. According to requirements of **29 CFR 1910.1200**, when the Contractor works in area(s) where chemicals are stored or used, the Contractor may request from the Project Manager the following information:

- Special precautions and/or safety procedures for the work area.
- Method of obtaining MSDS' for hazardous chemicals present in the Contractor's work area.
- Special procedures to follow in the event of an accidental release or exposure to the hazardous chemicals.

Chemicals Stored or Used by the Contractor

- The Contractor must take all necessary precautions to protect University employees, students, and visitors from exposure to the chemicals.
- The Contractor shall maintain material safety data sheets (MSDS) **on-site** for all hazardous chemicals used or stored at the job site. Copies of MSDS' shall be provided to the Project Manager and copied to the University of Delaware Occupational Health and Safety to the start of work.
- The Contractor is responsible for cleaning up any spills created or caused by the Contractor. Contractors must alert the University of Delaware's Public Safety department at 9-911.
- The Contractor must dispose of all hazardous chemicals in accordance with federal and state regulations. All hazardous waste generated from University facilities must be disposed of by contacting Occupational Health and Safety at (302) 831-8475, 222 South Chapel Street.