

PACIFIC LUTHERAN UNIVERSITY



CONTRACTOR GUIDE

PROJECT LEADER NAME:

CONTACT PHONE #:

Accidents, Medical, Fire, Spill or Police Assistance:

Dial: 9-911 then x7911 for Campus Safety from a campus phone

Or: -911 then 253-535-7911 from any cell phone.

BE PREPARED with the specific location of the accident (*building, floor, room number*). *Stay on the line until help comes. Call your contact as soon as possible...*

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RESPONSIBILITIES

Pacific Lutheran University (PLU) is committed to provide a safe and healthy learning and work environment for our students, employees and visitors to the University. Construction can be a challenging activity within this environment. Contractors are responsible to perform their tasks without sexually harassing and/or harming people, property, processes or the environment at PLU. PLU has provided this expectation guide so PLU and the Contractor both have a clear understanding of acceptable activities. Should sexual misconduct and/or the safety of people, property, processes or the environment be reported, a thorough investigation will take place to determine root cause analysis and corrective action. Any negligent disregard to these responsibilities may result in the termination of the contract. Additional requirements due to work outside of these guidelines may be provided by your PLU Project Leader.

REGULATORY COMPLIANCE

SAFETY COMPLIANCE: All contractors are subject to OSHA Construction Regulation, 29CFR1926, WA Labor and Industry Chapter 296-800 WAC, NFPA fire codes, NEC, local Fire Code and other local codes and accepted standards. Contractors should be prepared at all times for surprise inspections, fines and work stoppage if not in compliance. Contractors are responsible for all accident investigations, recordkeeping and requirements of OSHA.

ENVIRONMENTAL: PLU is subject to compliance to all WA Dept. of Ecology, Pierce County, and US EPA Federal environmental rules. As a contractor, you are also subject to city, county, state and federal environmental rules. The Contractor is responsible for learning the rules and abiding by them. While we cannot provide legal environmental advice, we do require advance notice of any releases to the air, water, or waste and measures taken to prevent contamination that may impact PLU.

SAFETY ORIENTATION

PLU Construction Management and EHS&EP leaders periodically provide Contractor Orientation to clarify expectation and rules. This may be combined with other project start meetings. This booklet provides some general information that would be common to most contracted jobs. The Contractor Guidebook is a general reference to clarify common expectations but does not provide job specific information.

Contractor Orientation and the Contractor Guidebook are beneficial to a safe and successful project, but is not a substitute for training requirements for you or your employees. As the Contractor, you are required to carry this information back to ALL of your employees who do not attend the meeting. It is very important that you hold your employees accountable as you may not be on the job at all times. As a general rule, accidents do not tend to happen when the Contract Leader is on site.

ACCIDENT REPORTING

All accidents or incidents must be reported immediately to Campus Safety at the number on the front of the book. For serious injuries, call -911 but keep in mind, most campus phones require a prefix (9) to get an outside line. Be sure to put this number on the front of your book. Contractors must follow the OSHA rules regarding first report of Injury forms, entries to the OSHA 300 Log, investigations and corrective actions for contract workers. If there is an injury to a PLU employee, student, or visitor due to Contractor activities, both the Contractor and PLU will conduct an accident investigation.



PERSONAL PROTECTIVE EQUIPMENT

When hazards exist, the preferred method of control is to barrier the hazard with guards, ventilation, safety devices. If that is not possible, PPE provides a barrier that is acceptable. If the hazard exists, you must protect. To avoid PPE, the hazard must be controlled by another method. Contractors are responsible for determining the hazards, providing PPE and enforcing the use for your employees. Should hazards extend it areas where students, employees or visitors are, the contractor is responsible for stopping until people are advised and protected. This includes but is not limited to creation of significant amounts of dust, fibers, chemical fumes or gases, Contact your Project Leader on how to alert others in the area.

The following guide may help you in these decisions but you are responsible for the decision to protect your employees.

Hazards	Protection	Additional Protection
Eyes: Dust, Particles, chemicals, welding, cutting, brazing	Safety glasses (Z/87) /goggles, face shield, welders hood & screens	Dust mask / respirator
Ears: Noise 85 dB & up 90 dB and up	Offer Ear plugs or muffs Mandatory ear plugs/muffs	Same
Head: impact from falling or flying objects, or from electrical shock or burns	Bump hats, hard hats, arc flash PPE. (required in tunnels)	See NFPA 70E for Arc Flash PPE
Hand Hazards: chemicals, heat, cuts,	Impervious barrier gloves, heat or cut resistant gloves	Gloves only protect from specific chemicals. Glove charts should be consulted.
Feet: Falling, rolling objects over 50 lbs. Rough terrain, nails, protrusions.	Sturdy Safety or Steel Toed Shoes with Puncture Resistant soles,	Metatarsal Guards for high hazards.
Respiratory: dust, dirt particles, chemicals that evaporate into the air.	Dust mask, respirators which are specific for the chemical being used.	Respirators wearers must pass a medical evaluation, have training and be fitted. Beards interfere with the seal and OSHA does not approve.
Arc Flash: electrical	See NFPA 70E	

FALL PROTECTION

Falls are the number one cause of fatalities in the construction industry. 150-200 workers are killed each year and more than 100,000 injured as a result of falls... The Contractor is responsible for compliance to all aspects of Chapter 296-155 WAC Fall Protection Standard for Construction Industry and 29 CFR 1926, Subpart M. This includes training for all employees who may be working at any elevation, within 6 foot of open edge, at or above 4 feet or at or above 10 feet foot potential fall with no parapet or other barrier. The contractor must provide the necessary equipment and use equipment properly to prevent falls.

The lack of an anchor point or parapets does not preclude the contractor from this obligation.

AREAS WHERE FALL PROTECTION IS REQUIRED:

When employees are exposed to falls (six feet or greater) from the following:

Unprotected sides and edges	Scaffolds and other work platforms
Rooftops	Runways and ramps
Stairways & landings	Overhead brick laying
Steel or low sloped roofs	Form work and reinforcing steel
Walking surfaces	Slab formwork
Balconies	Bridge surfaces
Excavations, wells, pits	Above dangerous equipment (any height)
Precast concrete	

METHODS OF FALL PROTECTION:

PASSIVE SYSTEMS	ACTIVE SYSTEMS
Guardrails	Anchorage Points
Safety Nets	Lanyards
Covers	Snap Hooks
Fences	Life Lines
Barricades	Body Harnesses

SPECIAL FALL PROTECTION INFORMATION

ANCHOR POINTS	Must be capable of withstanding a 5000 lb fall Threaded rods, sprinkler pipes, electrical conduits, or any small railings are strictly PROHIBITED
BARRICADES & WARNINGS	Due to the nature of a college campus, we require diligence is keeping all hazardous construction areas barricaded with fencing that is not easily removed or knocked down. Barricades must be capable of preventing PLU students, staff and visitors from entering dangerous work zones. Barricades must be checked several times a day to insure integrity. Warning signs shall be used.
CAUTION TAPE	May ONLY be used when the work or hazard for one day or less and is sufficient to protect the hazard. It must be effective during that time to prevent non-essential personnel out of the work area.
DELIVERIES	If deliveries are made to the work area from outside

	supplier, they should be made at the designated delivery area. No unnecessary personnel should be walking around the site.
GUARDRAILS	For open edges must have 42-inch railing (\pm 3 inches) capable of withstanding a lateral force of 200 lbs .at mid-rail.
HARNESSES	Back belts for fall protection – PROHIBITED Must be rated for 5000 lb fall.
HOLES	Floor or decking holes at an elevation must be covered or surrounded with barricades that must be able to withstand a 200-pound lateral force at all times. Do not store any material on a cover over a hole. Label any whole cover “OPEN AREA UNDERNEATH – STAY OFF!”
LANYARDS	They should be attached to a D ring between the shoulder blades above the employee harness When moving down a beam two lanyards are required when passing an obstruction to assure 100% fall protection (one must always be attached to an approved anchor point). Must be rated for a fall of 5000 lbs fall.
SCAFFOLDS	May only be erected, moved, dismantled, or altered under the supervision of a competent person who is trained on the scaffold standard requirements. All work levels must be fully planked Scaffolds should be on proper footing that prevents settling or displacement Requires standard guardrails (see above)
SAFETY MONITORING SYSTEMS (Observer)	Are prohibited by OSHA as the primary form of fall protection.
WARNING & PPE SIGNS	Must be posted at each entrance of the job site with requirements for PPE (i.e. Hard Hat Area)

LADDERS MUST:

- Rated Class 1 or Class 1A Industrial
- Used for their intended purposes
- Have rubber or equal feet for proper stability
- Inspected before being put into service

- In good condition
- Extends a minimum of three rungs over the touch point
- Repairs must be made by the manufacturer's designee and methods
- Removed from service immediately if they fail inspection or are damaged.
- All straight ladders must be secured - tied at the top to secure
- At least 2 feet taller than your maximum working height
- DO NOT stand on the top or second rung of any stepladder
- Do not use a stepladder as a straight ladder by leaning it against a wall or a vertical surface.
- Make sure you have the right ladder (height and type) for the job.

LOCK OUT / TAG OUT

PLU requires all contractors to follow the Energy Control Program commonly called Lockout/Tagout. All contractors must follow the PLU Program or provide their program to the project contact to avoid misunderstandings.

- All equipment must be locked and tagged if any activation or release could cause an accident.
- Each energy source must be locked and tagged with an individual lock for each person being protected.
- A written lock out procedure, which includes the locations of disconnects and verification methods, must be followed.
- A tag alone is not an acceptable energy isolation source. A lock must also be used.
- All energy isolating devices must be clearly identified to show what equipment they control.

No lock shall be removed of equipment, systems, or circuits without the authorization of the Project Leader and STLCC authorized personnel who will make every attempt to contact the lock owner prior to cutting the lock

ELECTRICAL SAFETY

ELECTRICAL AUTHORIZATION:

The Contractor must comply with all provisions of OSHAs electrical standard for Construction, 29 CFR 1926, National Electrical Code, NFPA 70E and any other applicable codes. All persons performing electrical work must be trained in electrical safety and codes. Where possible, all conductors shall be brought into zero energy state, locked and controls per Energy Control Procedure.

If this is not possible, other approved construction standard methods must be used to prevent electrocutions. This type work should not be performed alone.

ARC FLASH PPE: In all electrical work, the PPE that shall be worn must meet the requirements of NFPA standard 70E which is specific for the type of conductor.

GROUND FAULT CIRCUIT INTERRUPTERS

Ground Fault Circuit Interrupters are required on all portable electrical tools being used. They should be located between the permanent power source and the tool cord or extension. Always test a GFCI while under load to assure proper function – the test button alone on the outlet may not be working.

GROUNDING CABLES are required for drilling or cutting operations when there is a potential for electrical exposure.

CONFINED SPACES

PROGRAM: Have, and implement; a written confined space program that meets the minimum OSHA construction requirements

As a contractor who anticipates a confined space entry, you are responsible for having assessing to determine if the space meets the criteria of Permit Required Confined Spaces.

TRAINING: Provide proof that all employees assigned to perform confined space duties (supervisors, attendants, and entry personnel) have received appropriate training.

EQUIPMENT: For all Permit required entries, air monitoring equipment shall be available, calibrated and capable of monitoring Oxygen, Lower explosion limit, Hydrogen sulfide and other toxic chemicals that may potentially exist. PPE for emergency retrieval must include harnesses and lanyards for emergency extraction, tripod, respirators and/or self contained breathing apparatus.

PERMITS

Confined space permits are to be issued by the Contractor's Safety Representative (with notification to the PLU EHS&EP Department). Upon completion of confined space activities, the contractor must supply PLU contact with a copy of each confined space permit used during the project.

EMERGENCY RESPONSE: The contractor is responsible for having trained emergency response employees onsite during any Permit Required Confined entry. These responders must be immediately available on call and capable of responding immediately within a reasonable amount of time. No further entries should be attempted unless by trained, equipped responders.

CONFINED SPACE FATALITIES often result in multiple fatalities as a result of entering the same space without emergency response equipment.

CHEMICAL HAZARDS

- **CHEMICAL AUTHORIZATION:** When Contractors need to bring chemicals onsite that are not currently used at PLU, they must submit a MSDS and state where the chemical is needed and purpose for the chemical, This must be submitted to the EHS&EP Department who will review and respond within 1 working day. No chemicals will be allowed without this information. If you do not have all of the information, approval may take longer.
- **MSDS's** must be available in the area where they are used for emergency purposes (spills, injuries).
- **LABEL** all containers so they may be traced back to the MSDS in an emergency. (Example: if your employee is overcome by a chemical, you need to send the MSDS to the hospital so they know how to treat them. If the chemical is labeled, you should be able to find the MSDS).
- **HAZCOM** training for all your employees is your responsibility.
- **VENTILATION:** Chemicals may be safe to use outdoors with lots of ventilation is adequate, may not be safe to use in an unventilated room or confined space or other hazardous areas. You must retain a copy of the MSDS at the worksite for emergency purposes.

FLAMMABLE LIQUIDS

- Flammable liquids or gases are not to be used or stored in any location where sources of ignition exist within a 20ft. radius.
- All flammable liquids in containers or 5 gallons or more are to be used and stored with secondary containment.
- Storage of flammable liquids over night or longer on PLU premises is prohibited unless agreed to in writing by EHS&EP Department.
- No gasoline or flammable material storage is permitted inside the facility or on the roof of any of our facilities.

- All containers must be labeled to identify the contents of the hazard.
- Drums and tanks of 55 gallons or more must be the top dispensing type and must be grounded and equipped with self-venting bungs.
- Dispensing is to be done into a safety container electrically bonded to the container from which it is being dispensed. Dispensing and mixing of flammable liquids is to be done only in locations approved by Risk Management.
- Spray painting of flammable liquids is not allowed at PLU unless the material to be used is approved in advance in writing PLU EHS&EP Department.

COMPRESSED GASES

- Compressed gas cylinders and associated equipment are to be inspected daily and the observations recorded. Documentation of each inspection must be retained for examination.
- Compressed gases are to be transported on approved carriers with protective valve covers in place. Compressed gas cylinders must be secured in place during transport, in storage and in use.
- Equipment that uses flammable gas with oxygen or other oxidizing gases is to be protected with check valves or flash back arrestors. If a hazardous gas leak is detected, operations are to be shut down and EHS&EP Department notified immediately.
- All flammable and oxidizing gas cylinders not in use and all empty gas cylinders are to be stored in the location specified by EHS&EP Department. Empty gas cylinders are to be labeled "empty".

FIRE PROTECTION

HOT WORK PERMITS:

Hot work permits are required for all open flames, cutting, grinding, soldering or welding operations inside, outside, or on the roof of any building, this includes tar kettles, ordinary electrical equipment, or heated tools in a hazardous location where flammable liquids, flammable gases or combustible dusts are being used unless the area has been decommissioned. Hot work permits are issued by the EHS&EP Department and are required at all PLU facilities. All appreciable combustible materials must be moved or protected by non-combustible materials within a 35 ft. radius of any hot work or operations. The requirement for soldering is a 5-foot radius.



FIRE WATCH:

A fire watch must be present for all welding, cutting and heavy grinding operations. The fire watch must have fire extinguisher training and have an appropriate fire extinguisher readily available. The Contractor is expected to provide the necessary fire extinguishers. The fire watch shall be familiar with the facility and for sounding the alarm in the event of a fire. They will watch for fires in all exposed areas, try to extinguish them when obviously within the capacity of the equipment available, or sound the alarm. A fire watch must be maintained for at least 30 min. after the completion of welding or cutting operation to detect and extinguish any possible smoldering fires. Only flame-retardant materials or fabrics should be used to protect or barricade items or locations during projects.

SPRINKLER SYSTEM:

PLU Facilities Management and Campus Safety must be notified in advance before starting any work on the sprinkler system anywhere at PLU. Campus Safety or Facilities Management will ensure Central Pierce Fire & Rescue has been notified. Whenever possible the system must be re-pressurized prior to the end of that workday otherwise Fire Watch procedures must be initiated.

ALARMS: Disarming alarms is one of the most common reasons for campus fires. If your project requires you to disarm or in any way compromise any part of the Fire Alarm System, you must have approval from the Facilities Management Department. Do Not Proceed without approval from Facilities Management Division.

CONSTRUCTION EQUIPMENT

INDOOR EQUIPMENT: Gasoline or diesel powered equipment cannot be used indoors unless it is propane or electric powered due to exhaust fumes.

WORK AREA INSPECTIONS

You must perform a daily tooling and equipment inspections prior to starting work. Recordkeeping for these inspections is your responsibility to keep.

TOOLS: Contractors are required to provide their own equipment to handle construction material.

MATERIAL HANDLING EQUIPMENT: Material handling equipment must be provided by the contractor.

Equipment may only be operated by a trained, qualified person on the equipment to be used. Rigging is to be planned and completed by qualified personnel. Mechanical handling equipment must be inspected before use.

EXTENDED BOOMS OR ARTICULATING ARMS require the use of fall protection harnesses. Scissor lifts do not require fall protection equipment. They are designed to work completely from the platform which is guarded completely. All other equipment requires fall protection.

SPILL PREVENTION:

- All pumps, trucks, hoses, drums, tanks, etc. other than those containing materials to be delivered and used at the work site must be thoroughly cleaned of contaminants before being brought onto the site.
- All contractor equipment, including rental equipment, must be maintained, inspected, and operated in a manner that prevents fluid spills
- All vehicles and equipment must be free of any fuel or other fluid leaks causing puddles or non-compliances
- Care must be taken to use catch pans, absorbents, etc. as needed to prevent release of oil or chemicals to floors, the land or water.

SPILL RESPONSE

The contractor is responsible for preventing spill or releases to the sewer, storm water catch basins, or spills to the ground or air. You must be diligent to insure control of your chemicals, equipment and supplies to prevent the reporting of a spill to the land, water or air.

REPORTABLE CHEMICALS: You can look up your chemical on the EPA list of list to determine the reporting threshold for the chemicals you may use. This can be found at: <http://www.epa.gov/ceppo/pubs/title3.pdf> for example, if you enter. Chemicals is released to air, water or land that exceed the threshold require an immediate report is required to LEPC, SERC National Emergency Response Center:

EXAMPLE: A mercury spill over 1 pound must be reported.
p-Xylene must be reported if over the 100 lbs.

DISPOSAL OF TRASH, WASTE & SCRAP

TRASH created by the result of a contracted job is the responsibility of the contractor to collect, maintain and properly dispose in approved containers that do not leak, fly out of containers on campus or on the way to final disposal.

DISPOSAL SHOOT: Enclosed disposal shoots are to be used whenever solid waste materials are to be dropped greater than 10ft. Waste materials are to be removed from the work site daily. This must not be located over walkways used by students, staff or visitors.

SCRAP EQUIPMENT: The PLU contact must approve the disposition of equipment that is to be scrapped or removed from the site.

Note: People do not tend to fall down in neat clean work areas. It is the Contractors responsibility to maintain a clean work area

DISPOSAL OF HAZARDOUS WASTES

The Contractor must notify the PLU EHS&EP Department and the contractor contact when a contracted job may involve generation of hazardous waste as defined in 40 CFR 260-262... It is the contractor's job to contain, properly label, determine the waste category and properly dispose of the waste. EHS&EP Department will work with the contractor if there are any questions regarding managing hazardous wastes.

HAZARDOUS WASTES: Once a material (liquid, gas, solid) is inherently "waste like", abandoned or has no further value to recycle, sell or use in another manner, it is waste. If waste meets either of these two categories, it may be hazardous wastes:

(A) **LISTED WASTES:** If a waste is on any of the lists, F, U (process specific) or P, K list, (discarded, off spec), found in 40CFR216.33, it is hazardous without exception.

(B) **CHARACTERISTIC WASTES** hazardous due to the characteristics it exhibits: (i.e. performance related)

- (1) **Ignitable** -spontaneously combustible, or flash point less than 60 °C (140 °F).
- (2) **Corrosive** pH above 2 but below 12.5
- (3) **Reactive** – unstable under normal conditions (explosive, toxic fumes, gases, or vapors when heated, compressed, or mixed with water

- (4) **Toxic** - harmful or fatal, includes heavy metals, mercury, lead, etc other harmful if not fatal chemicals.

MIXTURE & DERIVED FROM RULE: If a non-hazardous waste is mixed with a hazardous waste, or the waste is derived from a hazardous waste, is hazardous waste. It is usually best to keep waste segregated.

It is the Contractors Responsibility to recognize when a waste fits this description of the associated EPA/WA references and handle the waste as hazardous including proper collection, label, storage and dispose of the waste with the Contractor as the Generator. EHS&EP may be consulted.

UNIVERSAL WASTES (Recyclable): The following waste has separate rules for disposal because to a large extent they may be recycled:

- Used fluorescent bulbs contaminated with containing mercury
- Used batteries that can be recycled
- Some PCB waste that can be recycled
- Some pesticides that can be recycled.

Universal waste have reporting requirements are simpler but still require proper packaging to prevent breakage, leaking and there must be a legitimate recycler who will accept the waste for the purpose recycling. Further rules may be found by contacting PLU EHS&EP Department.

Containers of Universal Wastes must be labeled properly. PLU uses a purple label that has "Universal Waste" and has room for the description of the waste and a date when the first material was introduced into the collection container.

FLUORESCENT BULBS that are broken no longer Universal Waste but become Hazardous Wastes and disposal will greatly increase. Pack bulbs so they do not break

ENVIRONMENTAL HAZARD REPORTING

Asbestos: Asbestos has been used in PLU buildings. A Survey of Asbestos was performed for each campus to identify location of known insulation. However, should your project take you to an area that was not previously identified, and you see material that “MAY BE” asbestos, stop the project until it is properly identified. PLU EHS&EP has a copy of the surveys that may be of assistance. It may be possible to seal the asbestos if the contracted work does not involve disturbing it. Otherwise, the asbestos will require removal by trained certified asbestos removal services.

Do not fail to report any suspicious material to your contact, who will alert the campus Maintenance Engineer.

Mold: Mold may have developed in places that are damp or dark. If you see material that may be mold, report it immediately to your PLU contact to determine the status. Do not continue to work until a determination can be made.

CONTRACTOR CERTIFICATION

I certify that I have reviewed and understand the requirements of this PLU Contractor Guide and will conduct all of our work practices within the requirements of this documentation and all applicable codes and regulations.

Violating or not following the safe work practices spelled out by this guidebook may result in contractors being removed from the PLU property and terminate the contract.

Company Name

Company Address

Name (Print)

Signature

Date

PLU Contact

Turn in a copy of this page with signatures to your Project Leader