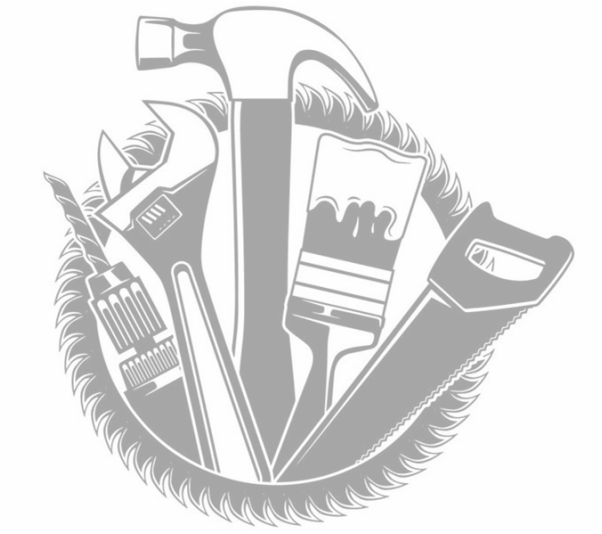
SAN FRANCISCO STATE UNIVERSITY

# *FACILITIES EMPLOYEES' & CONTRACTORS' SAFETY HANDBOOK*



# General EH&S Rules for All Workers on SFSU Properties

**These rules apply to all SFSU employees, contractors, and visitors.**

## Think before you act and report unsafe conditions, accidents, emergencies, and EH&S concerns.

- **Think about safety** before you act and don't take shortcuts. Know the potential hazards and ways to protect yourself and others before you start work. **Refuse to take an "unacceptable" risk.**
- **Immediately report** to your supervisor and to EH&S any compliance concerns, unsafe conditions, close calls, accidental or unauthorized releases, occupational injuries or illnesses, fires, or property damage. No retaliation will be taken against individuals for such good faith reporting. You may also report issues to the staff in Labor Relations.
- If you prefer, you may **anonymously report** EH&S issues via the EH&S office phone 415-338-2565.
- Be prepared to report and respond to emergency situations following the instructions provided in the SFSU Emergency Procedures guide available on the EH&S website.
- Certain **medications** may impair your ability to perform job task safely.
- Always adhere to medication warning labels and inform your supervisor or Human Resources if you may have associated job limitations.

## Drive responsibly and comply with traffic regulations. Be an alert Pedestrian.

- Drive responsibly to protect yourself and others. Obey speed limits and other traffic regulations when driving on or around SFSU premises. Always be alert for pedestrians and yield to them, including those disembarking from shuttle buses. Park only in authorized zones.
- Be alert around traffic. Follow pedestrian safety rules and cross traffic with caution.

## Use Hazardous Materials and Manage Wastes in Accordance with Procedures and Regulations.

- Know how to properly handle and store hazardous materials and wastes. Wastes and chemical containers, even when empty, may be removed from sites only by authorized individuals.
- Do not discharge wastewater or other wastes into storm drains or onto soil.
- Transporting SFSU hazardous materials on shuttle buses or in personal vehicles is prohibited.

## Use Equipment Safely and Follow Area or Task Procedures.

- Heed Warning Signs and Barriers. Know the safety features and emergency controls for equipment you use.
- Use the right tool for the task. Do not use damaged or malfunctioning equipment or tools.
- Do not tamper with machine guards, interlocks, lockout devices, or other safety controls.
- Follow Area or task permit procedures. Do not enter a restricted area unless authorized.

## Practice Safe Behaviors, Good Housekeeping, and Good Personal Hygiene.

- Possession, use, or sale of unauthorized drugs or illegal substances is prohibited.
- Possession of firearms or other weapons on SFSU premises is prohibited, unless authorized by law.
- Lift and move loads safely at all times.
- Wear the required personal protective equipment and dress appropriately for the task.
- Do not engage in rough physical behavior or “horse play.” Walk, do not run. Hold stairway handrails when ascending or descending stairways.
- Keep your work area neat, orderly, and free of unsafe conditions.
- Wash your hands before eating and after restroom use.
- This is a non-smoking campus.

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*All employees of a Category 1 Contractor, as defined in Section 6.4, must certify in writing on the acknowledgement form at the end of the handbook that they have read, understand, and will comply with the contents of this handbook before beginning work on SFSU premises.*

*The Category 1 Contractor must ensure that this certification is completed and provide such records to SFSU upon request.*

# Introduction

This Facilities Employees and Contractors Safety Handbook defines the rules and requirements for all employees, contractors and sub-contractors working on SFSU projects.

Employees and/or contractors performing work that requires a hazardous work permit are defined by SFSU as "Category I" Workers.

If you have questions concerning matters addressed in this handbook, please speak with your manager, SFSU Project Manager, the Campus EH&S staff, or the Contractor Safety Program Manager.

# Section I. General Information

## 1.1 Employee and Contractor Responsibilities

Employees and contractors are solely responsible for the awareness of and compliance with all applicable federal, state, and local EH&S laws and regulations relating to work performed at SFSU.

The Contractor is also solely responsible for ensuring that its employees and subcontractors comply with the rules and requirements described within this Handbook.

The provisions in this handbook are not all-inclusive. Contractor employees must look to their employer for additional safety instructions, training in best industry practices, and standards that apply to their work on SFSU premises.

Contractor is also responsible for the following:

- Staffing projects with employees and subcontractors who have been adequately briefed about and are aware of any unique or unseen hazards that they may encounter at the job site as defined by the SFSU Safe Work Authorization Form, and are trained, fully qualified, and competent in the work they will be performing.
- Informing SFSU Employees and other contractors and subcontractors in the same work area or adjacent areas of any hazards.
- Managing subcontractors and ensuring their compliance with all applicable laws and regulations and SFSU's requirements.
- Ensuring that all contractor and subcontractor employees complete the SFSU EH&S Contractor Safety Orientation prior to beginning work.
- Providing a copy of this handbook to contractor employees, and to their subcontractors
- Reporting all emergencies and incidents to your SFSU Site Contact.
- Paying all incurred fees, fines, and costs, including those incurred by SFSU due to any violations of EH&S regulations by Contractor or its subcontractors.

SFSU reserves the right to:

- Review Contractor's safety programs and procedures prior to and during the project
- Inspect the project site at any time
- Shut down the project if Contractor or sub-contractor is operating in a manner that does not comply with the law or the requirements in this Handbook or is deemed unsafe by a SFSU Project Manager or an EH&S staff member.
- Such shutdowns will occur at no cost to SFSU for any delays that may result.

Nothing contained herein changes the requirement that Contractor is solely responsible for all EH&S aspects of the work performed for SFSU.

## 1.2 Vehicle and Driving Safety

The following rules apply whenever driving a motor vehicle within a SFSU facility:

- Motor vehicles must be safely operated. Drive carefully to protect yourself and others.
- The speed limit is 5 miles per hour on SFSU property, and as posted on public roads.
- Obey all posted traffic signs.
- Only those Contractor vehicles required for delivery of equipment and materials or for the performance of necessary operations by Contractor are permitted on the campus.
- Radio and cell phone use is prohibited while driving on campus.
- Unsafe drivers will be barred from driving on SFSU sites.
- Commercial vehicles shall use a flagman when backing up on SFSU property.
- Horns may only be used in an emergency.
- Students / Pedestrians have the right of way at ALL TIMES.
- Commercial vehicles will be provided parking permits by Project Managers.

## 1.3 Contractor Parking

SFSU Facilities Help Desk will designate how Contractor's personnel, vehicles, vendors, and visitors must enter and leave the site.

SFSU Project Managers or Facilities Help Desk Staff provides the printed permits that must be placed on the dashboard of each vehicle required to be parked on site.

Contractor's personal vehicles must be parked in a public space or use

public parking at their own expense.

Vehicles must never obstruct emergency equipment, safety showers, eyewash stations, fire extinguishers, fire hydrants, fire lanes, exits, roadways, aisles, or other safety equipment. Loading docks may be used only for active loading or unloading, after which vehicles must immediately be moved away from the dock area.

Violators of any of these rules may be towed away at the vehicle owner's expense.

## 1.4 Contractor Identification

When on SFSU property, Contractor employees must wear company identification clearly visible at all times. Contractor employees must wear class II reflective clothing to work outdoors at night.

## 1.5 Contractor Site and Building Access

Contractors are subject to SFSU's access policies and procedures. Buildings that require key access need SFSU authorization. See the SFSU Project Manager or the Help Desk for key authorization.

Contractor personnel are permitted only in the specific areas where their work is being done. Travel through other parts of the building and site is prohibited except as necessary to reach the work site.

Emergency exits with alarms and those marked "For Emergency Use Only" may only be used in the event of an emergency.

Contractor must notify the UPD when access control to the site, a building, or an area will be compromised due to proposed Contractor activity, such as propping open doors, or removing a building wall or a section of a security fence. Such activities are prohibited without prior approval from CPDC.

Prior to conducting off-hours work, Contractor must coordinate with CPDC or the SFSU Project Manager.

## 1.6 Cafeteria and Bathroom Facilities

Contractors are permitted to use SFSU cafeterias, break room and bathroom facilities if their clothes are free of construction debris. If not, Contractors shall provide their own toilet/ washing facilities unless other arrangements have been agreed to.

## 1.7 Sports, Bathroom and Shower Facilities

Contractors are not permitted to use SFSU sports facilities. These facilities are for SFSU use only. Contractors are not permitted to use SFSU bathroom shower facilities without permission from the SFSU Project Manager or their SFSU contact.

## 1.8 Proper Work Clothes

Although SFSU has no formal dress code, Contractor employees are expected to dress appropriately for their jobs at all times.

## 1.9 Music Systems

The use of personal music systems such as iPods, MP3 and CD players, "Handheld" radios, headsets, earphones, air pods and related equipment may interfere with verbal instructions, audible alarms, and emergency warnings. The use of such equipment while performing permit-required work is prohibited.

"Open air" music systems (stereos, etc.) are not permitted where they may disturb other workers, faculty, or staff.

## 1.10 Smoking and Open Flames

Smoking is not allowed in any SFSU buildings or on the roofs. SFSU is a non-smoking campus.

Open flames, such as cigarette lighters and matches, are strictly prohibited in areas where flammable liquids, gases, or highly

combustible materials are stored, handled, or processed. This includes the roof areas and attics of all SFSU buildings.

If use of an open flame is necessary for your work task, a "Hot Work" permit must be obtained from EH&S.

## 1.11 Prescription and Over-the-Counter Drug Use

Contractors must instruct their employees to notify their supervisors or managers of the use of any prescription or over-the-counter medications that may affect work performance or alertness.

Working while under the influence of prescription or over-the-counter medications that endangers the health of the Contractor employee, or the safety of others will not be tolerated. Such use is grounds for immediate termination of services.

## 1.12 Prohibited Materials

The sale, possession, or use of illegal drugs, firearms, explosives, drug-related paraphernalia, alcohol (excluding alcoholic beverages that may be provided at SFSU-hosted events), or other controlled substances while on SFSU property (including company parking lots), is prohibited. Such actions are grounds for immediate dismissal.

SFSU reserves the right, without prior notice, to inspect all property brought onto SFSU property to determine whether prohibited materials are present.

## 1.13 Photography/ Camera Passes

Contractor must not operate cameras, cellphone cameras, photographic equipment, or audio-video recording devices without SFSU's prior approval and without SFSU personnel being present. University Communications will review all images and recordings and must authorize their use.

## 1.14 Confidentiality and Publicity

Any confidential, proprietary, or trade secret information that Contractor may learn, obtain, or access while working on SFSU premises remains SFSU property and may not be used or distributed in any way without written authorization from the SFSU Legal department.

Contractor must not distribute press releases or in any manner publicize its participation in any project without prior written approval from University Communications.

## 1.15 Non-Harassment Policy

SFSU is committed to maintaining a work environment free of unlawful harassment. SFSU prohibits sexual harassment, and harassment based on pregnancy, childbirth or related medical conditions, race, gender, religious creed, color, national origin or ancestry, physical mental disability, medical condition, marital status, age, sexual orientation, gender identity and expression, or any other basis protected by law.

Prohibited unlawful harassment includes, but is not limited to, any of the following behavior:

- Verbal conduct, such as epithets, derogatory jokes or comments, slurs or unwanted sexual advances, invitations, or comments.
- Visual conduct such as displaying derogatory and/or sexually oriented posters, photography, cartoons, drawing, or gestures. This includes material of a sexually explicit or discriminatory nature downloaded or transmitted by electronic communication systems such as computer equipment, voice mail, or e-mail.
- Physical conduct such as assault, unwanted touching, blocking normal movement or interfering with work because of sex, race, or any other protected basis.
- Threats and demands to submit to sexual requests as a condition of continued employment, or to avoid some other

loss, and offers of employment benefits in return for sexual favors.

- Retaliation for having reported or threatened to report harassment.

Harassment, threats, acts of violence, and inappropriate conduct are grounds for termination of the contracted services and banning from future access to the site.

## 1.16 Storage and Housekeeping

**Storage of Materials**

Project sites may have limited space available for the work area storage of materials. Contractor and SFSU Project Manager will prearrange all work, storage, and staging areas prior to starting the project.

Indoor storage in areas outside of the work area requires the approval of the appropriate SFSU Project Manager.

Outdoor storage may require additional approval of SFSU Project Manager.

Contractor must store materials and equipment so they will not endanger anyone at any time.

Contractor must carefully stack and locate all materials and equipment so that they do not block doors, self-contained breathing apparatus, fire extinguishers, stretchers, emergency eyewash stations, emergency safety showers, emergency equipment cabinets, fixed ladders, stairways, or electrical panels.

Contractor must not store materials or equipment in aisles, corridors, stairwells, traffic lanes, or sidewalks.

Contractor must not store debris, tools, equipment, pipes, etc., in an overhead location or leave loose material in the area above suspended ceilings.

**Cleanup During the Project**

Employee's and Contractor's must keep all work areas and storage areas in an orderly condition and free from excessive accumulations of waste materials and dust. The methods and frequency of cleaning by contractors shall be agreed upon with the SFSU Project Manager.

Contractor must clean up, control, and to the extent reasonably possible, minimize the amount of dust, debris, or other noxious substances from leaving the project work area, and do so in such a manner as not to cause a significant impact to indoor air quality or interfere with SFSU operations or equipment (such as the heating, ventilation, and air conditioning (HVAC) systems).

If Contractor Activities will generate dust or waste materials that can migrate beyond the job site, the contractor must notify the SFSU Project Manager and then clean such impacted areas outside its job site, based on prior approval of such cleaning methods by the Project Manager.

Burning trash on site is prohibited.

**Cleanup Upon Completion of the Project**

Contractor must remove from the premises all rubbish, tools, scaffolding, equipment, and materials not the property of SFSU and leave the work and premises in a clean, orderly manner.

## 1.17 Non-Hazardous Trash and Construction Debris

SFSU is committed to the proper disposal and recycling of non-hazardous solid waste. This requires careful segregation of this waste. For this reason, Contractor is prohibited from using any SFSU recycle containers for the disposal of its non-hazardous wastes unless directed to do so by the Project Manager.

Contractor is prohibited from discharging any wastes from construction, remodeling, and/or demolition work to the sanitary sewer. Contractor is prohibited from washing cement, plaster, paint, and related building materials from mixers, buckets, etc., down either storm or sanitary drains. Call the Campus EH&S staff for more information.

# Section II. Emergencies

## 2.1 Reporting Emergencies

In an emergency, contact the University Police Dept (UPD) as soon as possible by dialing (415) 338-2222 from a cell phone or "911"from a campus land line. UPD will then call emergency services and direct them to the emergency when they arrive.

When reporting an emergency, employees and contractors must provide the following information to the University Police Department:

- Caller's name and the telephone extension they're on
- Location of the emergency: building, floor, room, and area name
- Type of emergency (injury, fire, spill, leak, etc.)
- For spills or leaks: the substance and quantity involved (if known)
- For injuries or medical emergencies: the number of people injured, type of injury or medical emergency, whether the person has a breathing problem, and whether an ambulance is needed.

Stay on the line as long as it is safe to do so while UPD contacts emergency services, in case more information is needed.

Assign someone aware of the emergency to stand outside the building to direct emergency personnel to the site of the emergency.

Contractor must cooperate with personnel providing emergency services, as requested.

## 2.2 Fire and Fire Extinguishers

SFSU provides wall-mounted fire extinguishers throughout its facilities. If employees or contractors have been properly trained, they may use these extinguishers to fight incipient-stage (i.e., newly started, relatively small) fires.

If an employee or contractor is untrained or if the fire is deemed to be too large to fight effectively, evacuate the area and report the

emergency to the University Police Department immediately.

Employees and Contractors must report any used or out-of-date fire extinguishers to the Facilities work desk.

## 2.3 Earthquake

In the event of an earthquake, Employees and Contractors must take cover facing away from windows. They must not attempt to leave the building until all shaking has stopped. They must then follow the directions of the emergency coordinator.

## 2.4 Chemical Spills, Releases, and Exposures

SFSU provides emergency deluge showers and eyewash stations where chemicals are used. Contractor must ensure that its employees are aware of the locations of such equipment and have been properly trained on their use.
Contractor must notify the University Police Department and the Project Manager immediately, should any of the following occur:

- Chemical spills
- Release of any wastes to storm-drain sewers
- Release of any hazardous material or hazardous waste to the air, soil, water, storm drains or sanitary sewer
- Any adverse chemical reaction or injury
- Use of the deluge showers or eye wash stations by a contractor's employees

Contractors must cooperate with SFSU to help minimize the consequences resulting from a Contractor-caused chemical release.

Contractor employees should only assist with spill response if appropriately trained, equipped, and authorized for such work.

Wastes generated as the result of containment and cleanup of Contractor- caused chemical releases will be managed by SFSU after they have been appropriately identified and placed in appropriate waste containers.

Contractor is responsible for investigating releases of hazardous chemicals in which its employee was involved.

Contractor must provide a copy of the written investigation report and information about corrective-and-preventive measures taken to the Campus EH&S staff.

## 2.5 Emergency Exits – Exit Routes

SFSU has posted maps showing emergency exits and exit routes throughout its facilities. Contractor employees must familiarize themselves with the exit routes from their job sites.

## 2.6 Evacuation

During any evacuation, Contractor employees must leave the area or building through the nearest exit, if it is safe to do so, and must report to the designated SFSU emergency assembly area.

Contractor employees may not leave the assembly area until released by a SFSU emergency coordinator.

Contractor must immediately report any missing Contractor employee or other individual to a SFSU Building Emergency Response Coordinator.

## 2.7 Incident, Accident, and Near Miss Reports

Employees and Contractors must notify Campus EH&S (and the Project Manager) as soon as practicable, but no later than 8 hours after any of the incidents listed below has occurred:

- injuries requiring more than minor first aid
- vehicle accidents occurring on SFSU property
- incidents of criminal or suspected criminal activity
- damage to SFSU facilities or equipment
- spills or releases of hazardous materials
- potential exposure to human or animal blood or other body fluids
- non-storm water discharges to storm drain
- fires

Contractor must report incidents including “near-miss” or “close call” events in which significant losses or injuries could have resulted under slightly different circumstances to EH&S within 24 hours. If the Contractor cannot report within 24 hours, the Project Manager shall report the incident into EH&S.
A further report including any mitigation measures must be submitted by Contractor upon request.

### 2.8 Medical Services and First Aid

Contractor must provide first-aid equipment and training for its employees.
Employees and Contractors should refer to the “How to get help for medical events” located on EH&S website.

## Section III. Communication of Hazards

### 3.1 Potential Hazards at SFSU

SFSU’s goal is to identify and communicate known or reasonably foreseeable hazards in the workplace to all people performing work.

The project manager and occupant will review the *SFSU Safe Work Authorization Form*, to identify any area-specific requirements of the work to be performed.

Prior to approving work access to the project area, the project manager and occupant will discuss existing area hazards and hazards that are introduced to the work area by the project and resolve any concerns. Building floor plans, life safety maps and hazard surveys may be available to assist in identifying and locating potential hazards. SDSs for chemicals in the project work areas or areas adjacent to the project work area are available upon request.

## 3.2 Contractor Employees

Contractor must provide only employees who are familiar with the general and specific hazards of the job and are well prepared to deal with the hazards they may encounter while on the job at SFSU.

Contractor may **not** assign apprentice-level employees, or other employees undergoing on-the-job training to work at SFSU, unless specifically authorized in writing by the contract or the project manager and the employees are under the close supervision of another Contractor employee who is properly trained.

## 3.3 Contractor Chemical Hazards Identification and Communication

Contractor has the sole responsibility to identify and communicate all chemical hazards at the project site to their employees and to train their employees appropriately to protect themselves from such hazards.

Additional information on chemical hazards and controls is contained in:

- Sections 3.4 and 3.5 immediately below,
- Section 2.4 above concerning accidents or emergencies involving exposures and/or releases of hazardous chemicals.
- Section 4.12 concerning work on equipment or systems containing chemicals.

Contractor must ensure that all of their employees are trained and competent to handle the chemicals they use. This training must be designed to:

- Prevent the exposure of anyone in the work area to hazardous chemicals.
- Prevent accidental or unauthorized release of any chemicals to the environment
- Enable their employees to respond to any chemical incidents that may arise as a result of their activities on SFSU's premises.

If the Contractor's employees are not trained, equipped, qualified, and authorized to handle chemicals they spill, they should immediately get to a safe location and call the site's emergency phone number, 415-338-2222.

Contractor must make available upon request the SDSs for any chemicals brought on site.
Contractor must ensure that all containers of chemicals brought on site are properly labeled to clearly indicate the contents, associated hazards, manufacturer's name and the Contractor's company name and contact number.
When the project requires the removal or relocation of SFSU-owned hazardous chemicals, Contractor must discuss the plan with the Campus EH&S staff.

## 3.4 Contractor Chemical Storage at SFSU

Contractors must inform Campus EH&S when bringing hazardous materials on site. If Hazardous Materials are to be left on site for 30 days or longer, Campus EH&S should modify its site hazardous materials business plan with the local authorities.

Prior to storing any chemicals in the work area, Contractor must obtain prior approval from the Project Manager.

The project manager will consult with the Campus EH&S staff when significant quantities of chemicals - not normally handled on the site - are involved in the work performed by the Contractor.

Contractor will be restricted in the quantities of chemicals they may bring onto SFSU premises to the amounts required to complete a specific authorized work task and must not exceed limits for the area as allowed by applicable fire code restrictions or other regulations.

By the end of each workday, Contractor must seal, store properly, and secure all chemicals at each job location or else remove them from the site.

Oxy-acetylene tanks must be locked in approved gas-storage areas with overhead protection overnight, and whenever not in use. Under no circumstances may they be exposed to falling debris at any time.

Contractor must store its daily-use chemicals and compressed-gas cylinders as follows:

- Incompatible materials must be separated and kept in securely closed containers that will not spill or leak

- All flammable substances must be stored in FM- or UL-approved flammable storage containers or cabinets with flash arresters
- Flammable substances must not be placed near potential sources of ignition (sparks, flames, etc.)
- Bonding and grounding straps must be used whenever flammable liquids are dispensed
- Chemicals must be located within an appropriate storage area based on the characteristics of the chemical and manufacturer's storage recommendations
- When required by applicable codes or regulations, Contractors must provide secondary containment
- Compressed-gas cylinders must be secured in an upright position using two non-combustible straps or chains located at 1/3 and 2/3 of the height of the cylinder
- Valve-protection caps must be in place when compressed-gas cylinders are not in use
- Cylinder valves must be closed when cylinders are empty or are moved
- Only gas-specific regulators approved by the supplier that are in proper working order may be used

## 3.5 Disposal of Hazardous Wastes Generated at SFSU

Contractor must comply with all applicable federal, state, and local laws and regulations regarding the handling, packaging, identification, labeling, and storage of the chemical wastes it generates.

Only SFSU's approved waste-handling vendors are allowed to transport and dispose of hazardous chemical wastes generated on SFSU's premises.

When the production of chemical wastes is anticipated, Contractor must contact Campus EH&S staff to arrange for the transportation and disposal of properly labeled and packaged contractor-generated hazardous wastes.

Contractor must provide at least two weeks' prior notice of waste-disposal needs to the Campus EHS staff whenever circumstances allow and shall provide waste characterization information to the Campus EH&S staff.

Hazardous wastes must be kept within a controlled area and must be located or staged in such a way that allows safe and easy access for removal.

It is prohibited to dispose of hazardous wastes on SFSU property. Drains, sewers, sinks, rest rooms, trenches, trash containers and the ground may **not** be used for the disposal of hazardous chemicals or hazardous wastes.

## 3.6 Dust and Odors

Contractor must use appropriate controls to minimize dust, odors, fumes, and/ or vapors produced, especially from paint or epoxy-based materials, so as not to create a health hazard, interfere with, or be noticeable by SFSU personnel or others.

Contractor must notify the Project Manager and Campus EH&S staff prior to starting any work that will require the use of respiratory protection or which may generate objectionable chemical odors, vapors, or dust, such as floor stripping, floor epoxying, painting, carpet laying, roofing, and demolition.

Contractor must notify the Campus EH&S staff and the potentially affected building occupants prior to starting any work that will produce odors or dust, including work performed near the ventilation intakes of an occupied building.

Contractor conducting roofing work involving use of asphalt tar pits must locate such tar pits as far as possible from building doors, windows, and air intakes to prevent vapors from entering the building. When practical, work involving tar pits should be scheduled when buildings are not occupied.

If hazardous vapors or fumes will be generated indoors, Contractor must provide exhaust ventilation approved in advance by the Project Manager, and the Campus EH&S staff.

## 3.7 Controlling Contamination

- Demolition / Deconstruction / Repair
- Laboratory Equipment Decontamination,
- Discovery of Mold during Contractor Activities

***Demolition / Deconstruction / Repair***

Prior to the demolition, deconstruction, or repair of all or a portion of a building, All workers must identify, obtain, and complete any regulatory permits required for work. (for example: an Excavation permit is required when demolition occurs to walls, floors, or ceilings to prevent contact with utilities.)

In addition, All workers shall identify and remove any hazardous materials in the work area, including but not limited to: asbestos-containing materials, lead-based paints, fluorescent bulbs, and/or light ballasts containing PCBs, (polychlorinated biphenyls).

Workers must coordinate demolition / deconstruction / repair activities to minimize disruption to occupants and operations in any locations that could be impacted by the work. Demolition / deconstruction / repair work must be conducted in a manner that minimizes impacts on indoor air quality in the building or adjacent buildings.

***Decontamination of Laboratory Equipment***

Prior to removing any equipment from laboratories, All workers must ensure that the equipment has been certified as clean by an attached SFSU “clean” or “decontaminated” certification form. Contact EH&S for “decontaminated” certification forms.

***Discovery of Mold During Contractor's Activities***

Contractor must immediately suspend work and notify the Project Manager and Campus EH&S staff upon discovery of any contamination by mold, asbestos or lead based paint.

## 3.8 Ozone-Depleting Chemicals

Contractor must comply with applicable federal, state, and local laws and regulations and with SFSU's internal requirements related to Contractor's activities involving:

- the purchase, handling, addition, recovery, or disposal of ozone-depleting substances in refrigeration or fire-suppression equipment, and
- the servicing of refrigeration or fire-suppression equipment that contains ozone-depleting substances.

## 3.9 Noise

Contractor must obtain the approval of the Project Manager prior to engaging in high-noise activities indoors, where the noise level makes it difficult to hear normal speech without yelling.

Approval of the Campus EHS staff is required before engaging in high-noise activities outdoors that may disturb neighbors.

Contractor must take appropriate measures to minimize any annoyance to on- site personnel and to neighbors in adjacent off-site areas.

## 3.10 Radiation Sources

SFSU generates ionizing radiation from the natural decay of radioactive isotopes and from electrically powered machines, such as x-ray machines.

These sources are shielded and controlled by multiple engineering and/or administrative controls so that no excess radiation can be

detected using sensitive equipment placed next to the radiation-source shielding.

Prior to working in a radiation-generating area while the equipment is in operation, Contractor employees must be authorized to work in the area by the Project Manager and the SFSU Radiation Safety Officer (RSO).

## 3.11 Biological Hazards

SFSU utilizes mammalian cells and bacterial cells for production of protein and antibody substances using recombinant DNA technology. Cell lines in use are generally recognized as safe with little potential for human exposure.

During certain work involving bacterial cells, aerosols containing bacterial endotoxins from cell wall debris can be generated, potentially causing flu-like symptoms.

Research facilities may have laboratories where pathogenic organisms are used for research. Such laboratories use standard industry biosafety equipment and practices to contain the organisms and prevent human exposure. Other research laboratories may have human and animal tissue and blood samples. These laboratories also employ standard biosafety equipment and practices to prevent human exposure.

The Project Manager will provide appropriate warnings, evaluate the need for decontamination before work commences, specify any PPE requirements, and give other necessary safety instructions to Contractors who conduct work in areas with potential biological exposure hazards.

## 3.12 Warning Signs, Barricades and Flag Persons

Projects must provide appropriate warning signs, barriers, and/or barricades wherever such protection is necessary.

Where signs and barricades do not provide adequate protection, particularly along a road or walkway, a flag person must be used.

If Contractor must isolate sections of SFSU's parking lots, it must request assistance from the University Police Department two weeks in advance, except in an emergency situation. When properly notified, barricades can be set up the night before work begins. UPD Contact Number is 415.338.2222

## 3.13 Unattended Work

Contractor may **not** leave the job site unattended while potentially hazardous equipment or conditions are present, such as exposed live electrical sources or raised loads.

Warning signs and barricades are not sufficient. Equipment and materials must be properly stored, locked, and/or chocked.

## 3.14 Contactor's Property

Contractor is responsible for the safe condition and security of their own tools. SFSU assumes no responsibility for safeguarding Contractor's material, equipment, or supplies.

## 3.15 SFSU Property

Contractor must supply all items necessary to complete a job. Contract personnel are not permitted to use SFSU machinery, equipment, or tools unless such use is specifically defined in the contract, and the user/operator provides satisfactory proof of all appropriate training, required operating permits, and licenses if requested.

# Section IV. Safe Practices

## 4.1 (ACM) Asbestos-Containing Materials

Asbestos-containing materials are present in certain areas of the campus.

Asbestos-containing materials must not be disturbed by anyone other than a licensed and trained asbestos-abatement contractor.

Such contractors must operate under a properly executed SFSU Asbestos Abatement permit in accordance with Section V below.

Contractor must **not** install, or re-install, asbestos-containing materials in any building, structure, or equipment.

Project Managers will inform contractors of known locations of asbestos- containing building materials or naturally occurring asbestos in soils upon request.

Any materials that Contractor **suspects** may contain asbestos must not be disturbed without the prior review and consent of the Campus EHS staff, who will arrange for appropriate sampling of the material.

SFSU employees are trained to recognize ACM, in the event an employee identifies ACM, they must STOP WORK and notify EH&S and Project Manager.

## 4.2 Ceiling, Roof, Wall, or Floor Penetrations

Ceiling/roof and floor penetrations must be properly covered, temporarily sealed, or barricaded to appropriately guard against objects falling to the level below, or (if open to the outdoors) to prevent entry of precipitation, insects, birds, other animals, human intruders, airborne dust, etc.

Contractor must also barricade areas below uncovered ceiling/roof openings, elevated floor openings, or open ledges to protect employees from falling objects.

Elevated floor areas with open ledges must also be protected with guard rails. Toe boards must be used if there is a danger of falling

objects.

Whenever Contractor removes a floor tile or employees are exposed to a floor cutout, the opening must be clearly identified and securely covered.

Contractor must provide an adequate supply of guard barriers, railings, toe boards, and covers that meet minimum required ratings.

Whenever structures are penetrated, for example during partial wall demolition, care must be exercised to avoid utility lines. An Excavation Permit is required with such work.

## 4.3 Electrical Safety

SFSU Facilities Services and Contractor's must ensure that only qualified persons perform electrical work.

Live parts must de-energized before performing electrical work and any power shutoffs must be coordinated with Project Manager and/or Facilities Services Help Desk.

Systems must be considered "energized" until tested and proven otherwise. Tests must not be considered conclusive until the test equipment has been shown to still be functioning properly after the system test is completed.

Under no circumstances may exposed voltages greater than 30V be left unattended.

## 4.4 Electrical Safety Equipment

Any person's performing electrical work must provide and use appropriate protective equipment and safeguards such as approved insulated tools, rubber insulating mats, non- conductive ladders, fall protection equipment, insulating work shoes and gloves when performing electrical work.

All hot or live circuits in all types of panels must be adequately

protected with temporary shields during work. During energized work, Contractor may remove knockouts, insert conduit into boxes, install lock nuts and bushings, and use non-metallic fish tape only when temporary protective shields are in place.

Contractor must provide GFCI circuit protection for portable electrical equipment used in construction areas. In addition, GFCI protection is required for work in all damp, wet, and outdoor areas.

All extension cords used by Contractor must be the three-wire type for grounded tools and must be protected from damage. They must not be fastened with staples or extended across an aisle, doorway, walkway, or through a wall. Worn, frayed, or spliced cords must not be used. If the ground pin is broken, the cord must be immediately discarded or properly repaired.

Contractor must assure that all electrical equipment used is a type appropriate to the fire hazard classification of the area where work is to be performed and that it complies with all applicable governmental standards and generally recognized industry standards.

## 4.5 Energized / Pressurized Systems

If work can be done on equipment while it is de-energized/de-pressurized, and locked out, then that is the way it must be done. There are no exceptions to this rule. Cost and inconvenience are not acceptable reasons for working on an energized or pressurized system when the safer de-energized/de-pressurized alternative is possible. Violators may be barred from future work at SFSU.

When the nature of the task requires that it be done while energized, all work must be performed in accordance with an approved and properly executed *Energized Electrical Work Permit* (see Section 5.3) prior to starting work.

If, however, all voltages have been tested and shown to be equal to or less than 30V, and the Volt-Ohm-Meter has been tested to be shown to

still be working properly, then an *Energized Electrical Work Permit* will not be required.

Systems must be considered "energized" until tested and proven otherwise. Tests must not be considered conclusive until the test equipment has been shown to still be functioning properly after the system test is completed.

All work on energized systems must be done behind safety-barrier tape or barricades posted with appropriate warning signs.

Lone workers must not perform work on energized systems.

For work on pressurized systems that cannot be depressurized and blocked out, EH&S and the Project Manager must be contacted prior to initiating work to review and approve the planned safe work controls, practices and specific procedures associated with the work. A Line Breaking Permit will be issued by EH&S.

## 4.6 Fall Protection and Elevated Work

Contractor's and employees must use a personal fall-arrest system (PFAS) whenever they work within six feet of an unprotected roof edge, platform edge, or scaffold edge and are exposed to a fall in excess of six feet.

A personal fall-arrest system must consist of an anchor, lanyard, and harness, and the system must be secured to a properly rated anchor point defined by designated competent person.

SFSU and Contractor employees must inspect all safety features that are part of the personal fall-arrest system.

All fall-arrest systems must be rigged such that individuals can neither free-fall more than 4 feet nor contact any lower level.

SFSU and Contractor employees may **not** wear waist belts in place of harnesses for fall arrest.

SFSU and Contractor employees may **not** use sprinkler systems, hoists,

or utility piping for anchorage points. A designated competent person must inspect all personal fall-arrest equipment annually, and this inspection must be documented. Users shall inspect fall protection equipment prior to each use.

## 4.7 Fire Hydrants, Suppression and Alarm Systems

Prior to connecting to any fire hydrants, Contractor must obtain permission from the Project Manager. All hydrants, alarm boxes, and standpipe connections must be kept visible and readily accessible. If visibility cannot be maintained, then Contractor must provide clearly visible signs showing the location of the fire hydrant, fire alarm box, or standpipe connection.

## 4.8 Forklifts and Other Powered Industrial Vehicles (PIVs)

Gasoline-, propane-, or diesel-powered forklifts and other similarly powered industrial vehicles must not be operated inside buildings. Propane-fueling operations must be done outdoors.

Only those drivers authorized by Contractor and trained in the safe operation of the same type of forklifts utilized by Contractor may operate such Contractor- provided vehicles.

Contractor employees may not operate a SFSU forklift or other powered industrial vehicles.

Prior to using the vehicle, a forklift driver must conduct a pre-use inspection and have the inspection form present in the vehicle.

Every forklift, except those guided by a walking operator, must be equipped with a warning device (i.e., beacon light) and a back-up alarm that can be heard clearly above the normal industrial noise in the workplace.

SFSU Employees must complete Powered Industrial Vehicles training

prior to operating any PIV.

SFSU Employees and Contractor must fill out pre-use inspection checklist prior to operation of PIV.

## 4.9 Internal-Combustion Engines

No gasoline, propane, liquefied propane gas (LPG), or diesel-powered engines may be run inside SFSU buildings unless the engine exhaust is safely vented outdoors.

Such venting must be: (a) done in a manner that ensures that the fumes do not re-enter the building or affect other work areas and (b) approved by the Project Manager.

## 4.10 Lasers

Employees and Contractor must use only trained, qualified personnel to install, adjust, or operate Class 3 or Class 4 laser equipment.

Employees and Contractor must inform the Campus EHS staff of any plans to use such lasers, and they must post standard laser-warning signs in areas where such lasers are used and in adjacent areas where occupants could be harmed by possible exposure to the laser light source.

## 4.11 Lockout/ Tagout – General Requirements

Work requiring Lockout/Tagout (LOTO) of hazardous energy sources shall only be done by SFSU Authorized Persons (for LOTO) and Category I Contractors with appropriate training and experience.

Written, equipment specific LOTO procedures are required prior to working on machines, equipment or processes that do not fall under the “plug and cord” exemption. If SFSU does not provide an appropriate written, equipment specific, LOTO procedure, then the contractor must create one and follow it as part of the project.

SFSU’s general rule concerning LOTO by a Contractor is that a SFSU

Authorized Persons (for LOTO) will place their lock on first and remove it last upon completion of the task by the Contractor.

However, in some situations where a Category I Contractor has a long-ongoing responsibility to routinely perform work requiring LOTO for SFSU, the Project Manager, with written approval from the Campus EH&S staff may designate that appropriately trained and experienced Category I Contractor as their authorized representative to place the lock on first during work involving LOTO by another Category I Contractor.

If a contractor employee is working on equipment or a system that is to be locked out the contractor must attach his/ her lock and tag to the lockout device.
That Contractor employee must retain the lock key, and only this person is authorized to unlock the lock and remove the tag upon completion of the job. If more than one person is working on the system, then each must place his/her own lock on the switch and retain his/her own key. Master keys are prohibited.

In the event that a lock needs to be removed (cut off) by someone other than the owner of said lock, the written approval of two managers is needed.

## 4.12 Lockout/ Tagout of Equipment or System Containing Chemicals

Contractor must review potential chemical hazards associated with a project task before beginning work and must coordinate the conduct of such work involving potential exposure to or release of chemicals, with the appropriate Project Manager and/or Campus EHS staff member who is knowledgeable about the specific chemical usage and hazards of those chemicals.
MSDSs/SDSs, process flow diagrams, and hazard surveys (where available) may be referenced.

Contractor must not cut into or open any chemical-supply or waste flow line or system without the prior approval of the Project Manager

Whenever feasible, Contractor must drain all tanks, pipes, and equipment to be serviced and then flush or purge them of potentially hazardous liquid, solid, and gaseous chemicals.

Contractor must provide appropriate means (such as a bucket or basin) to catch and contain residual material in piping and to appropriately manage and dispose of such collected material in cooperation with the Campus EHS staff. See Section 3.05 concerning hazardous chemical wastes generated by the contractor on SFSU premises.

Contractor must notify Campus EHS if the task:

- Is anticipated to release regulated air pollutants or water pollutants in amounts that might exceed regulatory limits including those specified in existing permit conditions at the site
- Will require a Line Breaking Permit
- Will generate hazardous wastes requiring disposal by SFSU

Prior to any drilling or cutting operation on any lines or equipment containing flammable or combustible materials, Contractor must purge the lines with nitrogen or another appropriate inert gas. Contractor must evaluate other potential fire and explosion hazards in the area before seeking a Hot Work Permit or before work begins that could ignite a fire or initiate an explosion.

If Contractor purges any piping, tanks, or vessels with an inert gas such as nitrogen or carbon dioxide, then they must also assess potential asphyxiation hazards. Contractor must take precautions to prevent the venting of unsafe quantities of such purge gases into an enclosed workspace.

## 4.13 Manlifts (Mobile Elevated Work Platforms)

Employees will not operate any SFSU manlift unless the employee has been tested and authorized to operate that specific equipment by the facilities approved equipment trainer.

Contractor-provided manlifts may be used only by Contractor employees who have been properly trained in their operation.

When manlifts do not have standard guardrails, or when it is necessary to lean out over existing guardrails to work, Contractor employees must use personal fall-arrest systems.

Where boom-lifts are used, Contractor must use a personal fall arrest system at all times.

A pre-use inspection is required before a manlift is used. The pre-use inspection checklist shall be kept with the manlift so that it is available upon request.

## 4.14 Overhead Work

Work over the heads of unprotected personnel is prohibited. Work in such locations must be performed only after all personnel have been cleared from the area, the area has been barricaded, or there is no possibility of a falling object striking any person below the work area.

Hard hats shall be required where there is the potential for head injury from falling objects.

## 4.15 Personal Protective Equipment (PPE)

SFSU Employees are provided all necessary PPE and equipment to conduct work on SFSU campus.

Contractor must provide all necessary personal protective equipment and equipment training for their employees.

Contractors may **not** take personal protective equipment from SFSU

dispensers for their own use unless authorized to do so by the SFSU Project Manager.

Contractor must inform the Project Manager and Campus EH&S staff whenever a contractor employee plans to use a respirator or hearing protection in an area occupied by, or adjacent to, SFSU work activities.

When working indoors where safety glasses are required, Contractor employees must wear clear or amber lens impact-resistant safety glasses with solid side shields that meet or exceed ANSI Z-87+ requirements. Tinted lenses are approved for outside/outdoor use only.

Additional safety equipment, such as approved, steel-toed boots or shoes, may also be required by department protocols, standard operating procedures, or other written directives that are identified on the Safe Work Authorization Form.

## 4.16 Portable Ladders

In situations that require the use of portable ladders, Contractor must provide ladders appropriate to the tasks involved (usually fiberglass ladders). Contractor may not use SFSU portable ladders at any time.

Ladders are to be inspected before use. Defective ladders shall be removed from service and discarded appropriately.

Any portable ladder that is not a free-standing step ladder must be tied, blocked, or otherwise secured to prevent its being displaced while in use.

If the placement of ladders may block access to passageways, entries, or exits (including emergency exits) Contractor must post appropriate signage and/or barriers and obtain prior approval from the Project Manager.

## 4.17 Powder or Pneumatically Actuated Nail Guns

The use of pneumatically driven nail guns / staplers (operating at more than 50 psi pressure at the tool), and/or (gun) powder-actuated tools on SFSU property requires the immediate work area to be effectively barricaded against unauthorized entry with clear warning signs posted on the barricades.

Such tools may only be operated by individuals who have been properly trained and certified on the specific tool being used.

These tools shall have a safety device on the muzzle to prevent the tool from operating unless the muzzle is in contact with the surface as the trigger is pulled. Taping down the trigger of these devices to speed up the work will result in an immediate shut-down of the work and ejection of the Contractor.

Operator shall give verbal communication (usually the word “Shot”) before any tool of this kind is fired.

When not in use, or unattended, all pneumatically driven nail and staplers shall be disconnected from the air supply at the tool.

Mis-fired/unfired powder shots shall be disposed of as Hazardous Waste. Check with EH&S for proper disposal.
Powder-actuated tools shall be locked in their required storage containers when not in use. Violation of these rules can result in an immediate shut-down of the work and ejection of the contractor.

## 4.18 Roof Access

SFSU Employees and Contractors must fill out a “Roof Access Permit” before accessing any SFSU building rooftops.

Non-emergency roof access shall be prohibited during foul weather or high winds.

A lone worker must remain within sight or hearing of another person or maintain constant two-way radio or cell phone

communication while working on a roof.

Hatch access to roofs must remain locked when not in active use.

Roof access doors are to remain locked from the inside at all times.

## 4.19 Storm Drain, Process Wastewater and Sanitary Sewer Discharges

Contractor must not discharge rinse-water, wash-water, or industrial water of any type to the storm-drainage system or natural drainage channels on or adjacent to SFSU facilities.

Discharge of fire-hydrant water, sprinkler water, or potable water may be allowed, but Contractor must obtain prior approval from the Project Manager after consulting with Campus EH&S.

Contractor must prevent construction debris from their work activities from entering the storm-drain system and must protect areas subject to soil erosion against such erosion.

Contractors performing construction work must comply with applicable Construction Storm Water regulatory requirements which may include filing a Notice of Intent, preparing a Construction Storm-Water Pollution-Prevention Plan (SWPPP), conducting periodic BMP inspections, and/or filing a Notice of Termination. If a Construction SWPPP is required, Contractor must submit a copy to Campus EHS for approval prior to commencing work and is responsible for implementing the plan including training its workforce.

Contractor must not discharge wastewater into the sanitary-sewer system without prior approval by the Project Manager.

Wastewater not acceptable for discharge to the sanitary sewer must be collected by Contractor for offsite disposal. If the collected wastewater is characterized as hazardous waste, then conditions for disposal described in Section 3.05 apply.

## Section V. Hazardous Work Permits

Because of the hazards associated with the work described below, special permits are required to prevent injuries to people, damage to the environment, or damage to SFSU property.

Permits for the work described in this section are required at all times, except during an emergency if the risk of waiting for a permit exceeds the risk of working without one. The need for a permit is identified when completing the *Safe Work Authorization Form* with the SFSU Project Manager, EH&S, or Facilities Services Desk (FSD).

Permits are approved after the "authorized permit approver" checks that the preparations described in the "*Special Conditions - Required Precautions*" section of the permit form have been properly performed by SFSU Employee and/or the Contractor.

The Project Manager is responsible for arranging for an inspection of their preparations by the appropriate "authorized permit approver."

SFSU Employees and Contractors must post copies of approved permits in the immediate work area for the duration of the permitted work.

When permit work is finished, SFSU Employees and Contractors must complete and sign the post- work checklist on the bottom of the permit and notify the Project Manager and EH&S that normal operations may begin again.

### 5.1 Asbestos, Mold, or Lead Paint Related Work

Asbestos abatement work is defined as activities involving the removal of asbestos-containing materials, presumed asbestos-containing materials or thermal surface insulating materials. Such work requires an *Asbestos or Mold or Lead Paint-Related Work Permit*.

Work that may involve sanding, burning, chipping, or otherwise

removing lead- containing materials on SFSU premises requires an Asbestos or Mold or *Lead Paint-Related Work Permit*.

Neither lead-containing materials nor asbestos-containing materials may be applied or installed without the prior approval of the Campus EH&S staff.

## 5.2 Confined Space Work

A confined space is a space that has all three of the following characteristics:

- Is large enough and configured such that an employee can bodily enter and perform work.
- Has Limited means for access and egress.
- Is not designed for continuous employee occupancy.

Work that requires entry into a Confined Space is strictly governed. Specific requirements that must be met prior to entry are described in the Confined Space Work Permit which must be completed and countersigned prior to entry into a confined space.

## 5.3 Energized / Pressurized Work

When the nature of the task requires that it be done while the equipment is energized, an *Energized Electrical Work Permit and/*or a *Line Breaking Permit* must be completed and signed before work may begin. Contact Project Manager or EH&S for permit(s) needed.

## 5.4 Excavation Work and Structure Penetrations

Work that involves the following requires an *Excavation Permit*:

- Excavation, Trenching, Groundbreaking, or Tunneling
- Floor or Wall Penetration
- Soil Movement
- Use of a Concrete Saw

No work shall be done until the existence and location of unseen gas

lines, pipes, electrical conductors, contaminated soils, etc., has been determined.

Dial 811, to contact *Mark and Locate USA*, the national call-before-you-dig service, to ensure all known utilities have been identified. Allow 48 hours for the utility contractor to come out and mark known buried utilities with paint or flags. After 48 hours if utility company has not responded call 811 and make second request, allow 24 hours after second request before start of excavation.

In addition to having Mark and Locate USA identify known utility lines, ground penetrating radar (GPR) shall also be used to locate unidentified utilities and to identify clear path for excavation.

Contractors shall make daily inspections of each excavation. If at any time there is evidence of possible cave-in or slides, all work in the excavation shall immediately cease until the necessary safeguards have been taken.
All excavations shall be backfilled as soon as practical after work is completed, and all associated equipment removed.

NOTE: Hand digging within the first 12 inches and wall penetrations that do not go beyond the first two inches, do not require an excavation permit.

## 5.5 Hot Work and Portable Space Heaters

Work that involves one or more of the following requires a *Hot Work Permit*:

- Welding, Brazing, or Torch Soldering
- Portable Space Heaters
- Open Flames
- Heated Tar Pots
- Other Ignition Sources

Hot work requires a trained fire watch and appropriate type of fire extinguisher on all jobs. Contractors shall not use SFSU fire

extinguishers to meet this requirement. The person performing hot work cannot also act as a fire watch. An additional person is required.

After hot work is completed, the contractor must inspect the area and remain in the area until (a) it is determined that no smoldering or previously unnoticed fires exist or (b) an additional 30 minutes has elapsed, whichever is longer.

Persons doing Hot Work must provide and use non-combustible or flame proof shields or screens to protect all individuals from welding flash or arc flash.

When hot work involves working on flammable or combustible chemical lines or vessels, they must be depressurized, drained, purged of residual chemical, and tested to ensure a safe atmosphere.

Adjacent flammable and combustible chemical lines must also be depressurized and effectively protected by blanketing or shielding to protect them from damage.

Hot work on chemical systems must be coordinated with the chief engineer.

### *Portable Propane Space Heaters (Salamanders)*

A portable space heater is generally heated by propane fuel. As such, it presents risks of both open flame and carbon monoxide generation in poorly ventilated areas. Due to these potential dangers, the following rules shall apply.

A SFSU *Hot Work Permit* must be obtained before a propane-powered space heater may be used. (Note: a fire watch is not required after the heater has been turned off). Heaters shall not be left unattended while in use.

Heaters must be Factory Mutual or Underwriters Laboratory (UL) approved and shall not be used inside buildings, except in high-bay manufacturing/ warehouse areas or large construction areas with good ventilation.

Heaters shall be positioned away from all combustible material to reduce the possibility of uncontrolled fire and away from traffic to prevent them from being overturned.

## 5.6 Line Breaking - Gas and Liquid Handling Systems

When it is necessary to open a pipe, line, or duct that is or has been carrying flammable, corrosive, or toxic material, an inert gas, or any fluid at a volume, pressure, or temperature capable of causing injury a *Line Breaking Permit* must be completed and signed before work may begin.

System lines being worked on may include but are not limited to:

- sewage lines or steam lines
- refrigeration and air conditioning lines
- pressurized gas and/or liquid lines
- oil and chemical lines
- compressed air or gas lines, natural gas lines
- hydraulic/pneumatic systems
- laboratory sink drain lines

## 5.7 Mobile Cranes or Helicopter Lifts

Work that will involve helicopter or mobile crane lifts over SFSU property such as the installation of HVAC equipment on roofs requires a Mobile Crane or Helicopter Lift Permit.

Mobile cranes including portable crane derricks, power shovels, helicopters, and other heavy lifting equipment shall not be operated within ten feet of overhead electrical power lines. During crane lift operations, building occupants may be required to evacuate areas under the lift and swing radius. SFSU EH&S shall predetermine this requirement on a per project basis. If evacuation of building occupants is not feasible then the SFSU Project Manager must document, why relocation/ evacuation is not feasible in accordance with California

Code of Regulations (CCR) Title 8 Section 5002.

Helicopter lifts are restricted to 9:00 a.m.-5:00 p.m. and require notification of the University Police Department ten working days before the lift, so that they can inform the local authorities.

## 5.8 Scaffolding Work

Contractor must erect, use, and dismantle scaffolds in compliance with SFSU's scaffolding permit as well as all applicable laws, regulations, and local permitting requirements.

The work must be performed under the direct supervision of a Competent/ Qualified person.

## 5.9 Radiography

Contractors using radiation producing equipment to x-ray equipment, inspect welds, etc. require a *Radiography Permit* approved by the Radiation Safety Officer. See EH&S website for RSO contact information.

## 5.10 Fire Protection Systems Impairment

Work that impairs the function of the following, requires completion of a *Fire Protection Systems Impairment Permit*. Such equipment is not to be moved, relocated, or blocked even temporarily without the required permit.

Equipment such as:

- Emergency Exit Routes and Doors,
- Deluge Showers, or Eyewash Fountains,
- Fire Doors and Lanes,
- Fire Service Control Valves,
- Pull Stations,
- Smoke Detectors,

- Fire Suppression Systems (example: $FM200_2$, CO, Halon),
- Annunciators,
- Campus Fire Hydrants,
- Fire Water System (example: Standpipes, Sprinkler Riser Valves),
- Fire Pumps

# Section VI. Definitions

## 6.1 Area Occupant

A SFSU employee or designee who has supervisory authority for a work area in which hazardous work or impairment work is being performed. The Area Occupant provides permission for access to the work area for Category I Contractors and/or SFSU maintenance staff. When work is performed on equipment in common areas or outdoors, the Area Equipment Owner shall function as the Area Occupant. When renovation or new construction occurs in a SFSU operated facility where no Area Occupant or Area Equipment Owner has been identified, the Project Manager responsible for the construction activities shall function as the Area Occupant.

## 6.2 Authorized Employee (for LOTO)

A qualified person who performs lock out or tag out (LOTO) of specific machines or equipment in order to perform cleaning, repairing, servicing, setting up, and/or adjusting operations on that machine or equipment. An employee becomes an authorized employee once (a) he/she completes formal LOTO training and on-the-job training, and (b) another authorized employee observes the performance of one or more LOTO procedures and certifies that the employee is qualified.

## 6.3 Best Management Practices (BMP)

"Best Management Practices," which are state-of the-art recommended practices for organizations.

## 6.4 Category I Worker

A contractor that performs permit-required tasks (e.g., energized electrical work, confined space entry, crane lifts, etc.

| Category Worker Chart | |
|---|---|
| Category I Worker | Performs work on campus that requires a hazardous work permit.<br>Examples: Hot Work, Mobile Crane Lifts, Excavation, Confined Space Entry, Live Electrical Work > 30 V, Asbestos, Mold, or Lead Paint Abatement Work. |
| Category II Worker | Performs work on campus that does not require a hazardous work permit.<br>Examples: Painting, Plumbing, Landscaping, Auto Maintenance, Xerox Repair, Carpentry. |
| Category III Worker | Does not perform work on campus.<br>Present on campus to pick up or make deliveries.<br>Examples: DHL, UPS, USPS |

## 6.5 Contractor

Non-SFSU workers under contract to work on SFSU projects under the direct supervision of a third party (non-SFSU) employer.

## 6.6 Contractor's Representative

Category I Contractor's management representative

## 6.7 EH&S Staff

"Environment, Health and Safety" staff.

## 6.8 Emergency

Any of the following:

- A serious-injury accident
- A life-threatening incident
- Personal medical emergencies
- Serious occupational injuries or illnesses
- Spills or Leaks
- Environmental releases
- Fires
- Explosions
- Exposure to toxic or hazardous chemicals and
- Exposure to suspicious, unknown odors

## 6.09 Ground Fault Circuit Interrupter (GFCI)

Ground Fault Circuit Interrupter.

## 6.10 Hazardous Waste

Any waste classified as a hazardous waste under federal, state, or local laws and regulations.

## 6.11 Incident

An event that includes, but is not limited to, (a) accidents that require first aid or medical attention, (b) spills, leaks, or releases of materials or wastes on a job site, in a building, or to the environment, (c) fires and explosions, (d) extensive property damage, and /or (e) close calls or near misses of any such events.

## 6.12 Radiation Safety Officer (RSO)

“Radiation Safety Officer,” the SFSU employee who manages the radiation safety program, or his/her designee. No work involving radioactive materials or ionizing radiation sources may be undertaken without the notification, involvement, review, and approval of the RSO.

## 6.13 Safe Work Authorization Form

The Safe Work Authorization form is a form the Area Occupant uses to notify the Contractor of EH&S concerns relating to the work area and the Contractor uses to notify the Area Occupant of EH&S concerns relating to the work to be performed. The form must be signed by the Area Owner and Work Crew Leader before Contractor may perform any work in the area.

## 6.14 Subcontractor

Any company or person hired by a Contractor to perform work at SFSU facilities. On SFSU premises, all subcontractor employees are deemed to be employees of the Contractor, and the Contractor is responsible for ensuring their safety and safe performance.

## 6.15 Underwriters Lab (UL)

Underwriters Laboratories is a product safety certification service.

## 6.16 Work Crew Leader

An employee or Contractor responsible for a work crew performing project work or maintenance. In a work crew of one, that individual serves as the Work Crew Leader. Work crew leaders or their designee are responsible for completing the Safe Work Authorization Form and any applicable permits or forms.

## Section VII. Index

## Acceptance of Rules

*Please remove this form, sign it, and return it to your trainer or designee.*

All SFSU Facilities employees and Contractor employees are required to read through and understand all of the rules and procedures set forth in the "SFSU Facilities Employee's and Contractor's Safety Handbook".

Reading and understanding the Handbook is a requirement for work at SFSU and must be completed **before** working at SFSU.

SFSU has the right, but not the obligation to verify that all contractor employees have read and understand all of the rules and procedures set forth in the "SFSU Facilities Employee's and Contractor's Safety Handbook".

Contractor's representative, in accepting SFSU's contract for work, has agreed that only Contractor employees who are familiar with the routine and specific hazards of their job and who have been prepared to deal with the hazards they may encounter while on the job at SFSU will be sent to work at SFSU. This policy is an important protection for both SFSU and the Contractor against accidents.

### Employee's acknowledgment:

I have read, understood, and agree to abide by the rules and procedures set forth in the "SFSU Facilities Employee's and Contractor's Safety Handbook".

Name (please print):_____ Signature:_____

Name of Employee's Company:_____Date_____

### Trainer's acknowledgment:

The above-named employee was trained to understand and abide by the rules and procedures set forth in the "SFSU Facilities Employee's and Contractor's Safety Handbook".

Name (please print):_____ Signature:_____

Name of Contractor's Company:_____

Date of training: _____

# SFSU'S EH&S Policy and Responsibilities

## Policy

Consistent with our mission, we will strive to be a leader in Environment, Health, and Safety (EH&S) compliance and will follow relevant standards and best practices for protecting workers, the environment, and our facilities. We will strive to use natural resources in an efficient and sustainable manner and will conduct our activities according to the following principles and practices:

- **Worker Protection and Wellness:** We will manage workplace risks and provide appropriate training to ensure safe and healthy working conditions across SFSU. We will provide appropriate hazard warnings to campus organizations. We will support healthy lifestyles for employees through wellness programs and access to quality medical care.
- **Environmental Protection and Stewardship:** We will strive to minimize environmental impacts from our campuses and operations. We will work to minimize waste, conserve energy and water, and adopt appropriate purchasing practices to promote environmental stewardship. We will employ responsible design principles and operating practices to manage the risks of unauthorized or accidental releases.
- **Contractor Safety:** We will require contractors who work on our premises. to comply with regulations and site rules and to adhere to high standards for protection of workers, the environment, and property.
- **Emergency Preparedness:** We will identify reasonably anticipated emergency situations and be prepared to respond appropriately to minimize harm to people, the environment, and property.
- **Continual Improvement:** We will strive to continually improve our EHS performance by various measures, including the following:
  - Learning from events - accidents, close calls, and identified substandard conditions.
  - Benchmarking best practices from other universities to identify improvement opportunities; and
  - Conducting reviews and audits of our EHS programs and practices to monitor progress and compliance.

## Responsibilities of Employees

- **Employee Participation and accountability:** Compliance with EHS regulations, policy, standards, rules, and procedures is everyone's responsibility. All employees are expected to help manage EHS risks and to act responsibly to protect themselves, co-workers, the environment, and our facilities.
- **Management leadership, Participation, and accountability:** Our leaders, from top management to front-line supervisors, are responsible and accountable for EHS compliance and for managing the EHS risks of their organizations. Their active participation includes collaborating across organizational lines to integrate EHS risk management practices into our routine business practices.