University of South Carolina Safety Training

General Employee Training (GET) Reviewed 8 November 2022 Dominick S. Magliaro II Environmental Health and Safety Manager



General Employee Training

- Introduction
- Housekeeping
- Office Safety
- Personal Protective Equipment (PPE)
- Job Hazard Assessments (JHA)
- Ladder Safety
- Hearing Conservation
- Hazard Communication (HazCom)
- Hand and Portable Power Tools
- Asbestos Awareness
- Bloodborne Pathogens
- Hazardous and Universal Wastes
- Injury/Illness Reporting
- Vehicle Safety

- Emergency Procedures
 - Inclement Weather
 - Rally Points
 - Fire Alarms
 - Fire Extinguishers
 - CPR, First Aid & Automatic External Defibrillator (AEDs)
- Fall Protection
- Hot Work
- Electrical Work
- Hazardous Energy Control
- Confined Spaces



General Employee Training Introduction

- Everyone at USC Aiken is responsible for promoting a positive safety culture and creating a safe workplace for all.
- However, supervisors and managers at all levels are crucial to the success of a safe workplace. Support of safety by supervisors and management is paramount.
- All employees must be informed of workplace hazards.
- All workers have a right to know about hazards in the workplace and have a right to file workplace safety complaints.



General Employee Training Introduction

- All full-time, part-time, temporary and student employees must receive General Employee Training initially, annually, and when conditions change.
- Supervisors must maintain records of training completion for the duration of the worker's employment with USCA.
- Additional workplace training must be provided and documented by supervisors. Example: Laboratory Safety, Bloodborne Pathogens, workplace specific hazards.
- Contractors and visitors must be made aware of USCA hazards, emergency procedures and area specific plans.



General Employee Training Housekeeping

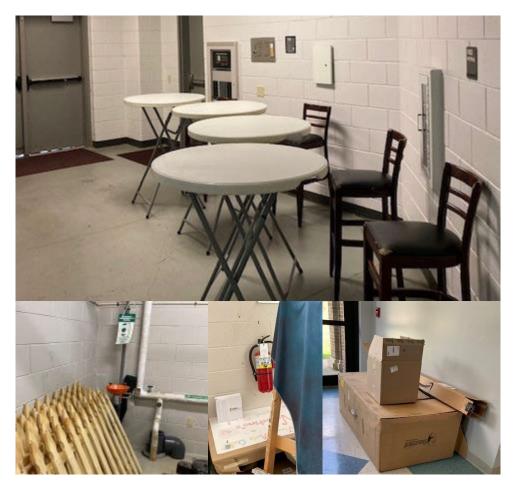
- Housekeeping is way to reduce hazards in the workplace.
- A neat and tidy area promotes efficiency, improves access to equipment and ensures for adequate egress.
- Housekeeping should become part of your routine to eliminate hazards in your area. (Tidy Friday)

The Occupational Safety and Health (OSH) Act of 1970 discusses several health and safety responsibilities of employers. One part of the act is the "General Duty Clause". Under the General Duty Clause of the OSH Act, employers must provide a work environment free of known hazards. Essentially, this responsibility falls upon supervisors and managers to assess their area for hazards and take action on hazards reported by employees.



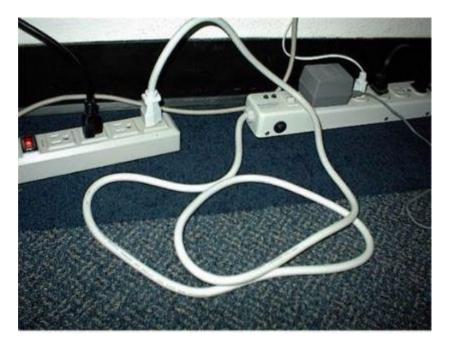
General Employee Training Housekeeping

- Tips for Housekeeping:
 - Remove unnecessary items from your area
 - Combustible items not in use must be placed in a proper storage area
 - Doors, hallways and points of egress should not be blocked
 - Fire extinguishers, electrical cabinets and fire alarm panels must have a three-foot clear zone surrounding the area.
 - Combustibles shall not be stored in classrooms, laboratories and shops.
 - Items may not be stacked within two-feet of a ceiling or fire suppression sprinkler head.
 - Do not stack items on the exterior frames of shelving units or in a manner that the items may become a falling object hazard









• Tips for Housekeeping:

- Avoid placing electrical or any other type of cords in walkways
- Do not plug extension cords into surge protectors or vice versa
- Do not overload electrical outlets or extension cords, do not use high amperage devices such as vacuums, heaters, toasters, etc.. with extension cords.
- Avoid "daisy chaining" electrical extension cords
- Keep space heaters and fans three-feet away from combustible material
- Unplug heat producing devices such as toasters, heaters, and burners when not in use.



General Employee Training Housekeeping

Maintaining Indoor Air Quality (IAQ) is a matter of great importance for the University of South Carolina Aiken's (USCA) Operations Department and University Leadership.

- Ideally your IAQ spore count is to be lower than the outside air quality, this could mean that spore counts upwards to 10,000 spores per cubic meter are safe.
- Many environmental, design and engineering factors impact IAQ.
- One major environmental factor that can degrade IAQ is mold and fungus.
- Properly operating heating, ventilation and air conditioning (HVAC) is one method of controlling environmental factors through building design and engineering.
- Other contributors to mold can be damp textiles, furniture, clothing, expired food products and poor housekeeping practices.



To reduce exposures to environments that may create a poor IAQ, the Operations Department relies on reports from building occupants of changing conditions.

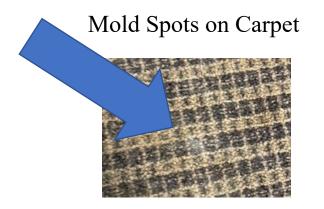
Please report the following conditions to the Operations Department at 3452.

- Water Leaks
- Unexpected Condensation
- Physical Mold Growth
- Bubbling wall finishes
- Indoor Humidity above 60%
- Allergic reactions, rhinitis or sinusitis and a history of fungal allergies.



General Employee Training Housekeeping-Mold Awareness

Mold Spots on an Office Chair







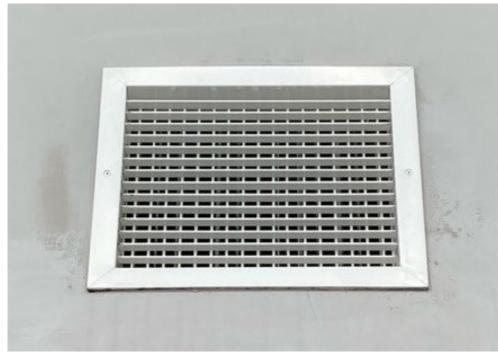
Mold inside a wall caused by a water leak



General Employee Training Housekeeping-Mold Awareness

These may not necessarily be mold, but the conditions need to be reported.

Moisture around an air register



Moisture and dust around an air diffuser



General Employee Training Housekeeping-Mold Awareness **Operations** University of South Carolina Aiken

Allergic Reactions:

- Allergic rhinitis or sinusitis Similar to hay fever or the common cold, but over an extended period of time. Symptoms include a runny nose, nasal or sinus congestion, irritated or red eyes, irritated or scratchy throat, and cough. Reactions occur quickly after exposure to molds.
- **Dermatitis** Red itchy skin and/or rash.
- Asthma May be aggravated or caused by exposure to mold, resulting in acute attacks of coughing, wheezing, and shortness of breath. Reactions usually occur within minutes after exposure, and may repeat 6-10 hours later.
- Hypersensitivity pneumonitis (extrinsic allergic alveolitis) Involves the lungs and body. ٠ Symptoms include tightness in the chest, difficulty breathing, cough, fever, and muscle aches. Reactions occur 6-8 hours after exposure. *RARE*

Fungal Infections:

- Invasive pulmonary aspergillosis Only occurs in the severely immunocompromised. Symptoms include pneumonia plus fever, bone pain, chills, headache, and weight loss. **RARE**
- Aspergilloma (formed in a pre-existing healed lung abscess) Symptoms include cough, coughing up blood, and weight loss. *RARE*
- Other Effects: Reported symptoms in damp buildings include fatigue, headache, fever, muscle ache, difficulty concentrating and mood changes. The cause of these symptoms isnot completely understood.

General Employee Training Housekeeping-Mold Awareness

If mold contamination is suspected the Operations Department will:

- Walkdown the area to investigate the source
- Remove or repair the source of contamination
- Barricade or restrict access to suspect areas
- Conduct air sampling and submit samples to a third-party laboratory for analyses
- Investigate environmental conditions and make adjustments and repairs as necessary to facility HVAC systems
- Develop a mold remediation plan for the subject area
- Verify that mold remediation was effective through testing and analyses
- Make laboratory results and mold remediation plans available to affected workers upon request.



General Employee Training Housekeeping-Mold Awareness

- Tips for Housekeeping:
 - Clean up spills
 - Use "wet floor" signs as required
 - Keep walkways free of trip and slip hazards
 - Ensure adequate lighting for the work to be performed
 - Empty waste bins as necessary
 - Do not dispose of lamps and batteries in waste bins
 - Adjust and arrange equipment is an ergonomic and efficient fashion
 - Report mold, leaks, and building related illnesses right away!





General Employee Training Office Safety

- Be mindful of sharp objects such as staples, tacks and clips.
- Keep drawers closed when not in use.
- Only open one drawer at a time.
- Place heavier items in bottom drawers
- Ensure chairs are serviceable
- Never use chairs to obtain an elevated height
- Keep paper cutter blades closed and secure along with scissors and other cutting devices
- Avoid wearing loose clothes/jewelry when operating shredders
- Ensure your computer, desk and chair are properly adjusted
- Take frequent breaks from screen time (recommended 10 min break for every 50 min of screen time)



General Employee Training Personal Protective Equipment (PPE)

Before we discuss PPE, we must first discuss the hierarchy of controls and where PPE fits within the hierarchy.

The hierarchy of control is the ideal order of use is:

- Elimination-Eliminating the hazard or source all together
- Substitution-Substituting the hazard for a less hazardous option
- Engineering Controls-Designing a method of controlling the hazard
- Administrative Controls-Warnings, written procedures and training
- Personal Protective Equipment- protective devices or clothing usually worn by a worker

As you can see the least preferred method of hazard control is PPE



General Employee Training Personal Protective Equipment (PPE)

Examples of PPE

- Hard Hats
- Safety Glasses (Z87 rated)
- Splashproof Goggles
- Ear Plugs
- Leather Gloves
- Nitrile Gloves
- Safety Toe Shoes



Hazard reduced by the PPE

- Protect from overhead hazards
- Used to prevent injuries from fragments, dust, or particles entering the eye
- Used to prevent hazardous liquids from entering the eye
- Reduces noise levels
- Used for handling materials
- Used to prevent injuries from chemical/biological hazards
- Used to prevent injuries from dropped objects



General Employee Training Job Hazard Analysis (JHA)

How do you select the right PPE? Use Job Hazard Analysis (JHA)!

The JHA process is a tool that workers and supervisors can use to assess their work area for and tasks for hazards.

While conducting a JHA you should think about "what can go wrong?" and "what will happen if ______occurs?".

The best way to complete a JHA, is to walk through the task while in the work area. JHAs should not be completed at your desk unless that is where the work is performed.

A JHA worksheet found in the USCA Worker Protection Plan can be used to assist in performing a JHA.



General Employee Training Job Hazard Analysis (JHA)

USC Aiken Job Hazard Analysis Worksheet

Requestor:					Job Title:				
Assessor:		Analysis Date:							
Activity	Hazard	Eye Protection	Ear Protection	Hand Protection	Head Protection	Foot Protection	Body Protection	Other	



General Employee Training Job Hazard Analysis

Stop Work Procedure

All employees and students can stop an unsafe act or condition. To safely stop work you must:

- 1. Attempt to safe the area
- 2. Notify supervision of the work stoppage and unsafe condition
- 3. Do not proceed until condition is resolved and supervison has developed a safe path forward

Examples of when you may Stop Work: unclear procedure/directions, unsafe equipment, undesired output, unexpected equipment responses, weather conditions, etc...



General Employee Training Ladder Safety

All employees and students must use ladders to obtain a height above "standard working height" (above eye level).

Do not stand on chairs and furniture or other makeshift ladders!

Follow the below rules for ladder use:

- Ensure you select the correct size and type of ladder for your desired use. Example: do not use an aluminum ladder for electrical work.
- Inspect your ladder prior to use to ensure that is in good working order, all hardware is secured, and the steps have good traction.
- Two people must carry and use ladders greater than eight-foot in height. One person should steady the ladder while the other ascends and works on the ladder. Be sure to keep your fingers clear of pinch points!



General Employee Training Ladder Safety

Ladder use rules continued:

- Place ladders on flat level surfaces when in use
- Never carry items up or down a ladder, use a bucket and tether and wear appropriate PPE
- Always maintain one hand on the ladder when ascending/descending
- If ladders must be used in walkways/doorways, use a barricade or spotter to direct traffic away from the area
- Never leave ladders unsecured and unattended if in a working position
- Secure ladders when transporting them in vehicles



General Employee Training Hearing Conservation

Many areas of campus expose workers to occupational noise. To help reduce exposures when working in a noisy environment workers should wear hearing protection.

Additional measures to achieve the as low as reasonably (ALARA) concept should be taken using time, distance and shielding from noise sources.

Examples of noise sources include presses, hammers, pneumatic tools, HVAC equipment, drills and powered industrial trucks.



General Employee Training Hearing Conservation

Table G-16 of 29 CFR 1910.95

Duration per day, hours	Sound level dBA slow response
8	90
6	92
4	95
3	97
2	100
11/2	102
1	105
1/2	110
¹ / ₄ or less	115

- Supervisors are to ensure workers are not exposed noise levels exceeding the time weighted averages in Table G-16
- Workers must be aware of their surroundings and report high levels of noise
- Currently, there are no occupations at USCA that require enrollment in a hearing conservation program

Under OSHA Standard 29 CFR 1910.1200 employers must communicate hazards to employees.

What this means is:

- Hazardous materials (HazMat) must be identified
- HazMat must be labeled using the Globalized Harmonized System of Hazard Classification labeling (GHS)
- Safety Data Sheets (SDS) must be available for chemical hazards
- Identified hazards and hazard reduction methods must be communicated to workers



What are the hazards associated with this item?

What is the nomenclature?



NFPA/DOT Hazard Diamond

Required on shipments and transportation devices/vehicles.



Safety Data Sheet (SDS) Requirements: Identification

(a) Product identifier used on the label;

(b) Other means of identification;

(c) Recommended use of the chemical and restrictions on use;

(d) Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party;

(e) Emergency phone number.

Safety Data Sheet (SDS) Requirements: Hazard(s)Identification

(a) Classification of the chemical in accordance with paragraph (d) of §1910.1200;

(b) Signal word, hazard statement(s), symbol(s) and precautionary statement(s) in accordance with paragraph (f) of §1910.1200. (Hazard symbols may be provided as graphical reproductions in black and white or the name of the symbol, e.g., flame, skull and crossbones);

(c) Describe any hazards not otherwise classified that have been identified during the classification process;

(d) Where an ingredient with unknown acute toxicity is used in a mixture at a concentration $\geq 1\%$ and the mixture is not classified based on testing of the mixture as a whole, a statement that X% of the mixture consists of ingredient(s) of unknown acute toxicity is required.

Safety Data Sheet (SDS) Requirements: Composition/Ingredient Information

(a) Chemical name;

(b) Common name and synonyms;

(c) CAS number and other unique identifiers;

(d) Impurities and stabilizing additives which are themselves classified and which contribute to the classification of the substance. For Mixtures

In addition to the information required for substances:

(a) The chemical name and concentration (exact percentage) or concentration ranges of all ingredients which are classified as health hazards in accordance with paragraph (d) of §1910.1200 and

(1) Are present above their cut-off/concentration limits; or

(2) Present a health risk below the cut-off/concentration limits.

(b) The concentration (exact percentage) shall be specified unless a trade secret claim is made in accordance with paragraph (i) of \$1910.1200, when there is batch-to-batch variability in the production of a mixture, or for a group of substantially similar mixtures (See A.0.5.1.2) with similar chemical composition. In these cases, concentration ranges may be used.

For All Chemicals Where a Trade Secret is Claimed

Where a trade secret is claimed in accordance with paragraph (i) of §1910.1200, a statement that the specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret is required.

Safety Data Sheet (SDS) Requirements: First Aid Measures

(a) Description of necessary measures, subdivided according to the different routes of exposure, i.e., inhalation, skin and eye contact, and ingestion;

(b) Most important symptoms/effects, acute and delayed.

(c) Indication of immediate medical attention and special treatment needed, if necessary.

Safety Data Sheet (SDS) Requirements: Fire-Fighting Measures (a) Suitable (and unsuitable) extinguishing media.

(b) Specific hazards arising from the chemical (e.g., nature of any hazardous combustion products).

(c) Special protective equipment and precautions for fire-fighters.

Safety Data Sheet (SDS) Requirements: Accidental Release Measures

(a) Personal precautions, protective equipment, and emergency procedures.

(b) Methods and materials for containment and cleaning up.

Handling and Storage

- (a) Precautions for safe handling.
- (b) Conditions for safe storage, including any incompatibilities.

Safety Data Sheet (SDS) Requirements: Exposure Controls/PPE

(a) OSHA permissible exposure limit (PEL), American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Value (TLV), and any other exposure limit used or recommended by the chemical manufacturer, importer, or employer preparing the safety data sheet, where available.

(b) Appropriate engineering controls.

(c) Individual protection measures, such as personal protective equipment

Safety Data Sheet (SDS) Requirements: Physical and Chemical Properties

- (a) Appearance (physical state, color, etc.); (b) Odor; (c) Odor threshold;
- (d) pH; (e) Melting point/freezing point;
- (f) Initial boiling point and boiling range; (g) Flash point;
- (h) Evaporation rate; (i) Flammability (solid, gas);
- (j) Upper/lower flammability or explosive limits; (k) Vapor pressure;
- (1) Vapor density; (m) Relative density; (n) Solubility(ies);
- (o) Partition coefficient: n-octanol/water; (p) Auto-ignition temperature;

(q) Decomposition temperature; (r) Viscosity.

Safety Data Sheet (SDS) Requirements: Stability or Reactivity (a) Reactivity;

(b) Chemical stability;

(c) Possibility of hazardous reactions;

(d) Conditions to avoid (e.g., static discharge, shock, or vibration);

(e) Incompatible materials;

(f) Hazardous decomposition products.

Safety Data Sheet (SDS) Requirements: Toxicological Information

(a) Information on the likely routes of exposure (inhalation, ingestion, skin and eye contact);

(b) Symptoms related to the physical, chemical and toxicological characteristics;

(c) Delayed and immediate effects and also chronic effects from short- and long-term exposure;

(d) Numerical measures of toxicity (such as acute toxicity estimates).

(e) Whether the hazardous chemical is listed in the National Toxicology Program (NTP) Report on Carcinogens (latest edition) or has been found to be a potential carcinogen in the International Agency for Research on Cancer (IARC) Monographs (latest edition), or by OSHA.

SDS Non-Mandatory Information: Ecological Information

(a) Ecotoxicity (aquatic and terrestrial, where available);

- (b) Persistence and degradability;
- (c) Bio accumulative potential;

(d) Mobility in soil;

(e) Other adverse effects (such as hazardous to the ozone layer).

Disposal Information:

Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging.

SDS Non-Mandatory Information: Transport Information

- (a) UN number;
- (b) UN proper shipping name;
- (c) Transport hazard class(es);
- (d) Packing group, if applicable;
- (e) Environmental hazards (e.g., Marine pollutant (Yes/No));
- (f) Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code);
- (g) Special precautions which a user needs to be aware of, or needs to comply with, in connection with transport or conveyance either within or outside their premises.

Regulatory Information:

Safety, health and environmental regulations specific for the product in question.

General Employee Training Hand and Portable Power Tools



Five Rules for Tool Use:

- 1. Select the right tool for the job
- 2. Use tools as designed
- 3. Only use tools that you are trained and authorized to work with
- 4. Ensure tools are kept in good working order
- 5. Inspect tools for damage prior to use
- 6. Wear appropriate PPE



Further tool use guidelines:

When using power tools ensure the cords are serviceable with no exposed conductors.

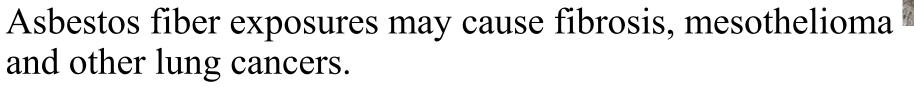
Do not "daisy chain" power tool sources.

Regulate compressed air to less than 30 PSI for cleaning tasks Never bypass guards, kill switches or safety features



General Employee Training Asbestos Awareness

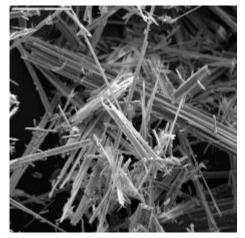
Asbestos is still used today in the manufacturing process of building materials such as floor coverings, ceiling tiles, wall coatings, fabricated finishes and other materials.



Asbestos is dangerous when it is handled, disturbed, or removed.

If you suspect asbestos fiber exposures, please contact the EHS Manager, your supervisor and HR immediately.

USC Columbia tests for asbestos periodically







General Employee Training Bloodborne Pathogens

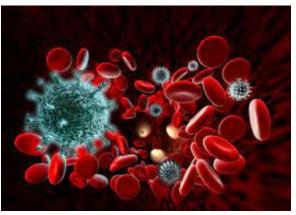
Bloodborne pathogens are found in blood, body fluids and other biological material.

These pathogens can cause diseases such as human immunodeficiency virus (HIV) or hepatitis B.

Workers are at risk from bloodborne pathogens hazards when they are exposed to environments that may allow foreign biological material to enter their body through skin, eye, mucous membrane or parenteral contact.

If you perform duties as a childcare provider, athletic trainer, custodian, laundry/locker room, health care, lifeguards, police or certain laboratories you are more likely to be exposed to bloodborne pathogens than other careers at USCA.

Please consult your supervisor, EHS Manager and the USCA Bloodborne Pathogen Plan for more information.



Hazardous Waste – is a solid waste, or a combination of solid wastes, which may pose a hazard to human health or the environment because of the physical, chemical, or infectious, characteristics of the waste or because of its quantity or concentration.

Solid– is broadly defined under RCRA and may include any form or waste (solid, semisolid, liquid, or contained gas). Whether the waste is regulated by

Waste– is any discarded material including solid, liquid, semisolid, or contained gaseous material resulting from industrial operations, commercial, mining, agricultural operations, and community activities; however, the definition of "waste" does not include solid or dissolved material in domestic sewage.

Universal Wastes– batteries, pesticides, lamps, aerosols, and mercury containing equipment are considered universal waste at the time the user decides to discard the item.

Hazardous Waste poses a threat to humans, wildlife and/or the environment. Wear appropriate PPE when handling HazWaste.

Numerous wastes generated at USCA are hazardous and must be disposed of properly. Please see the USCA Hazardous Waste Plan for specific wastes that must be collected. If you are unsure of how to dispose of your waste ask your supervisor, lab manager or EHS Manager.

Ensure hazardous waste is collected in shatterproof containers that are resistant to the waste they contain and are marked properly (please see example next slide)

Notify your supervisor, lab manager or the EHS Manager when waste containers are ready for pickup.



Hazardous Waste Tag Example:

Tag ____ of ____

HAZARDOUS WASTE Federal and South Carolina law prohibits improper storage or disposal.

If found, contact the Environmental Health and Safety Manager at 803-641-3538, USCA Public Safety at 803-648-4011, or the S.C. Department of Health and Environmental Control.

Container Number:

Container (size & type):

Location:

Generator Name:

(Responsible Supervisor, PI, Instructor, or Dept. Chair)

Phone-#:

Date Established:

For a list /description of the contents refer to the reverse side of this tag.

Container Number

Enter a UNIQUE container number in this blank space. To generate a container number, just add the letter code for your department to any unique numbering system that meets the needs of your department. A department can use any numbering system provided that the container numbers are unique and begin with the department abbreviation. For example, CHM-1 would be the first container to be numbered by the Chemistry Department.

Universal Wastes must be collected and stored in areas designated by each generating department.

- Universal Wastes must be logged in for each waste type and container (see example next slide).
- Universal Waste containers and boxes must be labeled as "Universal Waste" to prevent discarding items into the refuse waste stream.



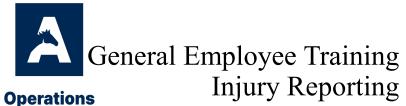




Example Waste Log

Universal Waste

уре	Department			
Waste Nomenclature	Quantity	Unit of Issue	Waste Handler Name	Date
	1			1



University of South Carolina Aiken



Supervisors and workers are responsible for reporting work-related injuries and illness to human resources, EHS and CompEndium regardless of severity of the injury or illness.



General Employee Training Injury Reporting

Important Phone Numbers for Injury Reporting:

- USCA Campus Police Emergency Line (803) 648-4011
- USCA Human Resources (803) 641-3455
- CompEndium (877) 709-2667



• USCA Environmental Health and Safety Office (803) 641-3538



General Employee Training Vehicle Safety

All operators of USCA owned or leased vehicles must submit a TS-100 form, driver record and receive Fleet User Safety Session (FUSS) training prior to vehicle operation.

No-one under 21 may operate a 15-passenger van.

Students may not transport other students without being under the supervision of USCA faculty or staff.

Students may not operate vehicles outside of the CSRA and Columbia area.

Golf carts may not be operated on roads with a speed limit above 35 MPH.

Operators of Powered Industrial Trucks (PITs) require vehicle specific training, please contact your supervisor or EHS Manager for more information.



General Employee Training Vehicle Safety

Tips for Safe Driving:

- Perform a safety walk around the vehicle prior to the day's use.
- Check behind the vehicle for hazards.
- Use only hands-free mobile devices while driving.
- Do not operate at unsafe speeds.
- Follow all traffic rules.
- Only one golf cart on the pedestrian bridge at a time.
- Report all accidents to USCA police at 803-641-3319





General Employee Training Emergency Procedures

Emergencies can occur at any time and often occur unexpectedly and without warning.

The campus has an emergency action plan (EAP) to reduce the impacts of incidents on campus. Employees should familiarize themselves with the EAP, fire extinguisher locations, AED locations, exits, shelter locations and rally points.

In the event of an emergency follow the EAP. Faculty and staff are responsible for the accountability and safety of students under their instruction and subordinate staff.



General Employee Training Emergency Procedures

Best Practices for an Emergency

- Remain Calm
- Safe the Area
- Communicate your status (casualty, locations, hazards, etc..)
- Evacuate if safe to do so
- Take shelter if necessary (Must take shelter for tornadoes and earthquakes)

Shelter is an area free of hazards such as windows and projectiles that can structurally protect you in the event of a building compromise.



General Employee Training Emergency Procedures Inclement Weather

The CSRA is prone to thunderstorms, occasional tornadoes, ice storms and even earthquakes. When inclement weather occurs USCA leadership will issue delay, early release and cancelation information through network and app notifications.





General Employee Training Emergency Procedures Inclement Weather

On average 88 people die every year from lightning strikes.

During thunderstorms:

Avoid going outside if you can

- Seek shelter away from trees, metal structures or other conductors.
- Avoid using umbrellas with metal frames
- Hail can accompany thunderstorms, and can damage vehicles, 24 people a year are injured by hail.

Tornadoes are extremely dangerous and can occur without warning.

Tornado Watch-tornadoes are likely

Tornado Warning- tornado has been observed

- Seek shelter immediately!
- Shelter away from windows, in the interior most room if possible.
- Avoid areas that contain objects that may become projectiles.



General Employee Training Emergency Procedures Inclement Weather

The CSRA on the rare occasion experiences severe ice storms.

- Ice storms can cause power loss due to trees and lines breaking under the wight of the ice.
- If possible, avoid driving when there is ice on the roads. Ice may not be visible and is known as "black ice".
- Be sure to keep emergency supplies in your vehicle in case you become stranded during a winter weather event.

The CSRA is surrounded by geological fault lines. The area routinely experiences earthquakes ranging from 1-5 on the seismic scale.

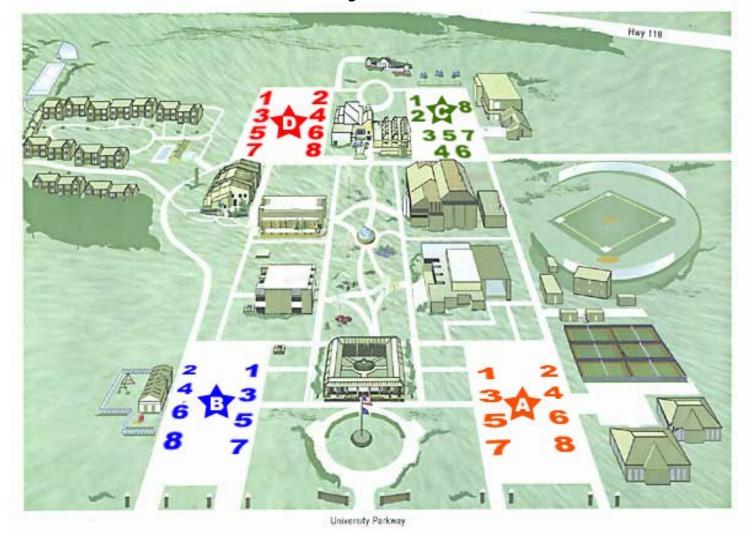
- During an earthquake gas lines and electrical supplies may become damaged. Use caution when leaving shelter after an earthquake.
- During an earthquake take shelter in a doorway, under a sturdy table or another area that can shelter you from debris and support building hazards.
- If possible, prop exit doors open so they do not become wedged.



General Employee Training Emergency Procedures Rally Points

B-Lot

- 1. Library
- (H&SS) Writing Room, Language Lab, Station, Institutional Effectiveness
- 3. (PEN)Math, Psychology, Academic Success
- 4. (H&SS) Communications, Foreign languages, Sociology
- 5. (H&SS) English, History, Political Science, Philosophy, (PEN) CSD
- 6. Children's Center



A-Lot

- 1. (SAC)Natatorium
- 2. (SAC) Gym, Cafeteria, Food Services
- (SAC)Student Life, Book Store, International Studies
- 4. (PEN) Career Services, Records, Economic Development
- 5. Tennis Courts/Softball Field
- 6. (PEN) Admissions, Financial Aid, Finance, HR
- 7. Softball/Tennis Courts
- 8. Nursing

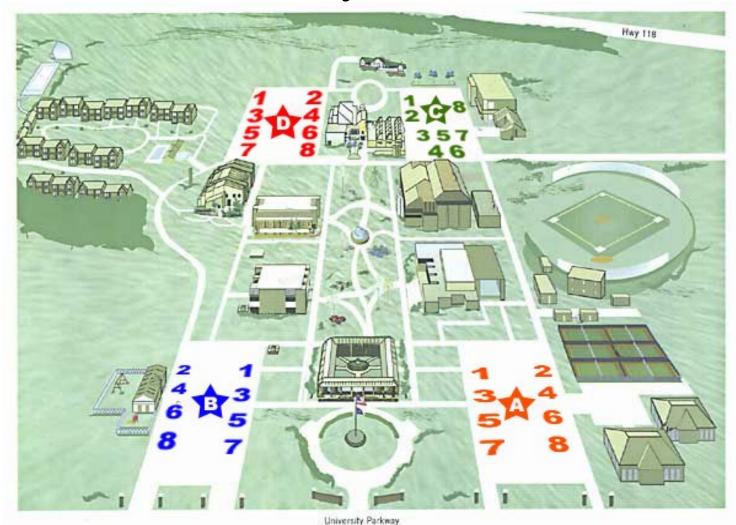


General Employee Training Emergency Procedures Rally Points

D-Lot

- 1. Pacer Downs
- 2. Pacer Downs
- 3. (Science) Chemistry
- 4. (Etherredge) Theatre
- 5. (Science) Academic Affairs
- 6. (Etherredge) Theatre
- 7. (Science) Biology, Geology
- 8. (Etherredge) Theatre

Note: Housing has additional Rally Points not shown, see the appropriate housing director or BEC for more information.



C-Lot

- 1. Alumni House
- 2. Etherredge Center
- (B&E) Counseling Center, Conference Center, Continuing Education, Computer Lab
- 4. (B&E) Business, Wellness Center
- 5. (B&E) Chancellor's Suite, Ed Gym, SBD, Athletic Sciences
- 6. Counseling Center, Disability Services
- 7. (RPSEC) Store, Planetarium, Solarium
- 8. (RPSEC) Offices/Classrooms





General Employee Training Emergency Procedures Fire Alarms

All USCA employees, students, faculty and contractors must evacuate to a rally point when a fire alarm annunciates in their building. This means everyone!

Fire alarms at USCA annunciate with an audible alarm and a visible strobe light. Evacuate your area to a rally point upon either signal.

When evacuating be sure to report to your assigned rally point in an orderly fashion. Do not go to your vehicle. Accountability must be taken at the rally point to ensure everyone has evacuated safely.

All occupants must evacuate during fire drills and actual alarms. No exceptions!

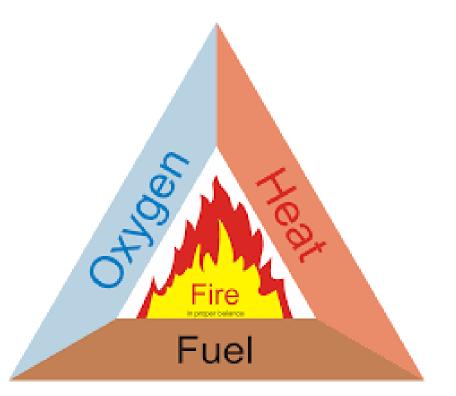
An announcement or email will be made when fire alarm testing is conducted. During this period occupants will not evacuate when the fire alarm annunciates but must evacuate when notified by other means.



Conflagrations (fires) require three things to achieve chemical reaction (burn)

- 1. Oxygen
- 2. Fuel
- 3. Heat

Remove one of these items and the fire hazard is reduced.



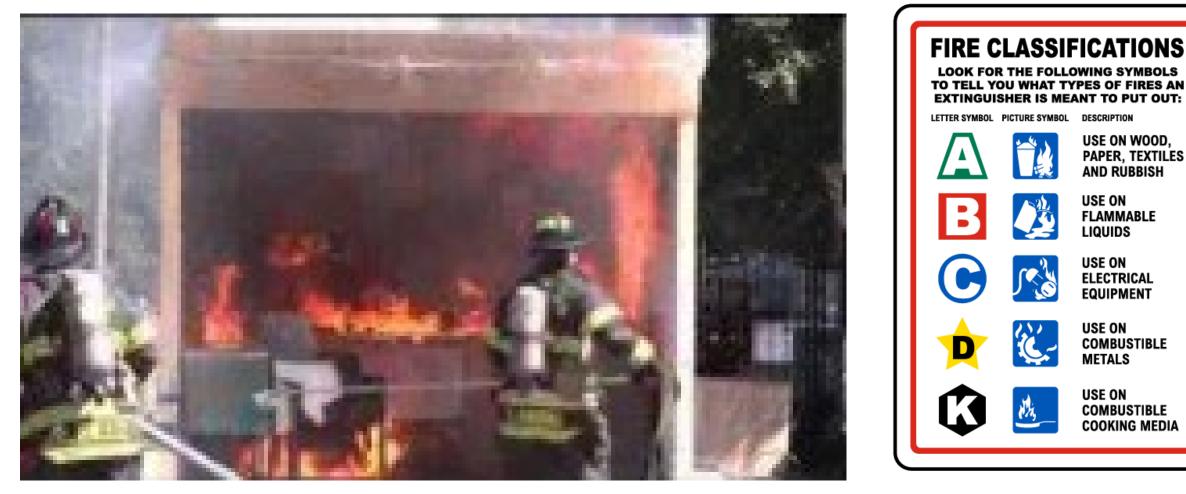


Fire extinguishers are designed to extinguish small fires in the incipient stage. The incipient stage of a fire is the growth stage when the fire starts. The next stage, is free burning. USCA employees are to never attempt to extinguish a free burning fire unless they must do so to safely evacuate. The smoldering stage is when there are no visible flames. Smolder is extremely hot and dangerous.





When selecting a fire extinguisher, be sure the extinguisher is the correct type for the class of fire present.





When extinguishing a fire use the P-A-S-S method.

P-Pull the pin

- A-Aim at the base of the fire
- S- Squeeze the handle
- S- Sweep back and forth until the fire is extinguished





General Employee Training Emergency Procedures CPR, First Aid and AEDs

Certain employees at USCA have duties that require additional emergency response training.

Maintenance workers, physical trainers, childcare providers and building emergency coordinators are examples of occupations at USCA that may require CPR, First Aid or AED training. Supervisors can schedule training with the EHS Office.

Building emergency coordinators have been provided with sealed and complete OSHA/DHEC compliant first aid kits. The kits are for emergencies and occupational related injuries. Departments are responsible for replenishing first aid kits used outside of an EAP incident.



General Employee Training Emergency Procedures CPR, First Aid and AEDs

Every building owned by USCA will have an AED.

AEDs do not "restart" your heart, they provide electrical shock to restore a regular heart rhythm.

Do not operate an AED unless you are trained to do so or under the supervision of a qualified individual.

AED training is provided in conjunction with American Heart Association (AHA) CPR training by the EHS Office.



All USCA employees and students should be protected from falls and falling objects.

To prevent injuries from falling objects when working from elevated positions, be sure to secure tools and loose objects to prevent them from falling.

If it is unfeasible to secure items from an elevated position, barricades and signs should be used to prevent access to the area and warn others of the hazard.



Fall protection requirements differ for different classifications of workers.

General class workers are covered by 29 CFR 1910 and will be provided fall protection when walking and working from heights greater than four-feet, excluding ladders.

Construction class workers are covered by 29 CFR 1926 and will be provided fall protection when walking and working from heights greater than six-feet, excluding ladders.

Supervisors must follow the USCA Fall Protection Plan located on the USCA EHS Website when selecting and using fall protection methods.



Fall protection requirements differ for different classifications of workers.

General class workers are covered by 29 CFR 1910 and will be provided fall protection when walking and working from heights greater than four-feet, excluding ladders.

Construction class workers are covered by 29 CFR 1926 and will be provided fall protection when walking and working from heights greater than six-feet, excluding ladders.

Supervisors must follow the USCA Fall Protection Plan located on the USCA EHS Website when selecting and using fall protection methods.

Workers must be trained on the fall protection that they are assigned to use.



Areas that May Require Fall Protection (not all inclusive)

- Roofs
- Holes
- Pits
- Scaffolding
- Rigging
- Bridges
- Elevated Work Platforms (Lifts)

Different Types of Fall Protection (not all inclusive)

- Permanent Guardrails
- Temporary Guardrails
- Safety Nets
- Personal Fall Arrest Systems(PFAS)
- Travel Restraints
- Fall Restraints
- Lifelines







General Employee Training Hot Work

Welding, cutting, brazing and controlled burns are examples of hot work activities conducted at USCA.

When performing hot work observe the following precautions:

- Ensure the area is neat and clean, remove unnecessary combustibles and flammables
- Two fire extinguishers rated for the hazard must be within 25 feet of the heat source
- Two people must perform hot work activities, one may have to provide fire watch duties
- Ensure a means of egress exists without obstruction from the heat source
- Hot work performed outside of shops and hot work areas must be permitted. Contact the EHS Manager for permit requirements







General Employee Training Electrical Work

Electrical workers require additional specific training and are classified by OSHA as either "unqualified" or "qualified". USCA does not have any "unqualified" electrical workers.

Qualified Electrical Workers at USCA are:

Operations, Maintenance and Etherredge Center Shop workers.

All other USCA employees and students are not electrical workers and are not authorized to perform electrical work, no matter how simple the task such as changing light bulbs or resetting tripped breakers.



General Employee Training Hazardous Energy Control

Hazardous energy is stored potential that may cause harm to a worker if not isolated. Hazardous energy may be electrical, hydro, pneumatic, kinetic or another source. Hazardous energy is controlled through the use of locks, tags or a combination of both. This is called lockout/tagout.

Workers and supervisor that participate in the USCA Hazardous Energy Control program must receive special training to isolate hazardous energy and work on equipment under lockout/tagout conditions.

Employees, students, visitors and contractors are to never remove an energy isolating device. Only the individual identified on the energy isolation device may remove the lock or tag.





General Employee Training Confined Spaces

A confined space is a space that: is large enough and so configured that an employee can bodily enter and perform assigned work; and has limited or restricted means for entry or exit (for example, tanks, vessels, silos, storage bins, hoppers, vaults, and pits are spaces that may have limited means of entry.); and is not designed for continuous employee occupancy.







General Employee Training Confined Spaces

A permit required confined space is a space that:

- Contains or has a potential to contain a hazardous atmosphere
- Contains a material that has the potential for engulfing an entrant
- Has an internal configuration such that an entrant could be trapped or asphyxiated by inwardly converging walls or by a floor which slopes downward and tapers to a smaller cross-section
- Or contains any other recognized serious safety or health hazard

A non-permit required confined space is a confined space that does not contain or, with respect to atmospheric hazards, have the potential to contain any hazard capable of causing death or serious physical harm.



General Employee Training Confined Spaces

Prior to entering a non-permit required confined space, atmospheric testing and hazard analysis shall be conducted to verify the space still meets the requirements of a non-permit required confined space.

At no time shall an employee enter any confined space without another competent employee present. Currently there are no permit-required confined spaces on campus that requires USCA worker exposure.

However, in the event entry into a permit-required space is required all conditions of 29 CFR 1910.146 must be met and a confined space plan must be established identifying all permit-required confined spaces and entry procedures along with supervisor and entrant training.



General Employee Training Conclusion

A 25 Question Test will now be administered. Be sure your supervisor updates your training records.

General Employee Training is an Annual Requirement See you Next Year!

Questions/Comments? Please contact the Safety Office at (803)641-3538 Email: Dominick.Magliaro@USCA.Edu