Cihan University-Erbil

Health & Safety Declaration

Examination Policy & Guidance for "Health & Safety Declaration"

2023-2024

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1. Policy purpose

Cihan University-Erbil's mission to "prepare students to create the future" involves the use of a wide variety of hazardous materials and processes that require special training and control measures to protect students, employees, and our environment from harm. The following University safety, health, and environmental policy and the management program outlined in this document form the basis for accomplishing our mission in a safe and environmentally responsible manner.

The objectives of the Safety Policy of Cihan University-Erbil are to ensure that:

- All staff, students, researchers, and visitors are aware of the biological hazards, legislative requirements, University policy, and procedures associated with working with microorganisms and biohazardous material.
- Staff, students and researchers are aware of their responsibilities in regard to biological safety at Cihan University.
- All staff, students, researchers, and visitors receive appropriate training and information that enables them to recognize potential hazards associated with their work.
- Risk management procedures are in place in the event of biological spills.

Appropriate waste disposal systems are in place for biological materials.

2. Policy statement

The Safety Policy of Cihan University-Erbil is based on the firm conviction that accidents that cause personal injury or damage to property or the environment can be prevented. No phase of University business or operation is of greater importance than the safety.

Cihan University-Erbil will provide and maintain a safe and healthy environment at all locations and will establish operating practices designed to assure the safety of all.

All students, faculty, and staff are responsible for their individual safety performance and for protection of the environment. Each instructor/supervisor also has the responsibility to create a climate of safety and environmental awareness. Safety and environmental protection must be an integral part of every job. It is the responsibility of all to comply with safety rules and to work in such a manner as to prevent injuries to themselves and others and to prevent damage to the environment.

The prevention of accidents and the protection of the environment are in the best interest of all. Only through constant mutual effort and cooperation can we achieve these goals.

3. Policy Content

1. Responsibilities

Cihan University-Erbil Safety, Health, and Environmental Policies and Procedures

The safety, health, and environmental policies and procedures documented in this manual apply to all students, contractors, visiting scholars and scientists, and employees—regardless of rank—involved in activities associated with the operation of Cihan University-Erbil or performed on University owned or leased property.

1.1. President

- Ensures that the University has an effective safety, health, and environmental program.
- Ensures that the necessary resources are allocated to effectively administer and implement the program.
- Makes appointments to the Presidential Committee on Safety and Environmental Health and attends at least one meeting each year.
- Includes a review of the University safety program in at least one meeting with the Vice Presidents each year.
- Reinforces a positive safety culture by commenting on obvious safety efforts and hazards during visits to campus work areas.

1.2. Vice Presidents

- Ensure that the divisions under their administration are effectively implementing the University safety and environmental program.
- Include a safety review in at least one meeting with division reports annually.
- Recognize and reward excellence in safety performance by division reports.
- Attend at least one meeting of the Presidential Committee on Safety and Environmental Health annually.
- Reinforce a positive safety culture by commenting on obvious safety efforts and hazards during visits to campus work areas.

1.3. College Deans

- Ensure that the departments under their administration are allocating sufficient resources and are effectively implementing the University safety and environmental program through such activities as regular on-site visits and reviews of safety inspection reports.
- Review the department's safety program with each department chair/director annually.
- Recognize and reward excellence in safety performance by department chairs and directors.
- Reinforce a positive safety culture by commenting on obvious safety efforts and hazards during visits to campus work areas.

1.4. Department Heads

General Responsibilities:

- Allocate sufficient budget and personnel resources to implement the University safety and environmental programs and policies.
- Convey a positive attitude toward the University safety and environmental programs.
- At least annually, or more frequently as needed, evaluate the effectiveness of department safety efforts by reviewing safety inspection results and injury reports as well as walking through each work area.
- Recognize and reward excellence in safety performance by department staff.
- Direct department activities such that protection of the safety and health of students, visitors, and employees, as well as the environment, is an integral part of each activity.
- Ensure that students, contractors, visiting scholars and scientists, and employees are informed of and fulfil their responsibilities within the University safety, health, and environmental protection policies and programs.

- Ensure that students, contractors, visiting scholars and scientists, and employees receive appropriate and timely safety and environmental information and training.
- Maintain up-to-date, and make available, all necessary written department safety plans, chemical inventories, and material safety data sheets.

  Specific Responsibilities:
- Appoint the department safety liaison and supervise and direct their activities.
- Appoint a qualified chemical hygiene officer for departments with one or more chemical laboratories.
- Complete and file a research employee exit statement for each research staff and graduate student leaving the University.
- Approve all exceptions to the University policy on children in the work place.
- Establish a list of the safety and environmental training required for each position within the department and ensure that each employee receives the necessary training. Environmental Health and Safety should be consulted for assistance in establishing training requirements.
- Implement a process for reporting and correcting department safety, health, and environmental hazards and for verifying that appropriate corrective actions have been taken, including those identified as a result of an injury.

1.5. Staff, Managers and Supervisors

- Integrate safety, health, and environmental protection into the daily activities of students, employees, and any other persons they supervise.
- Provide training and information to students, employees, and all others they supervise as requested by department administration and as required under University programs and policies.
- Review new equipment and procedures for recognized safety, health, and environmental hazards and take appropriate precautions before they are used or implemented.
- Investigate all incidents resulting in injury or property damage and report them to their department administrator and Environmental Health and Safety. Close calls must also be investigated and reported if they are found to have had the potential for personal injury or property damage. All employee fatalities must be reported immediately to Environmental Health and Safety regardless of cause.
- Enforce safety rules and review work areas daily.
- Maintain a written record of the content of each training session and the identification of the trainer and all attendees.
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1.6. Department Safety Liaison

The safety liaison performs duties related to department safety, health, and environmental protection under the direction of the department Head and acts as an intermediary with Environmental Health and Safety. All academic departments shall have a department safety liaison unless exempted by Environmental Health and Safety.

1.7. Laboratory Assistants

The laboratory assistant should assist in the day-to- day work at college's lab. under the supervision of the faculty by preparing the laboratory in advance before the practical lesson

start. To perform this duty, they should read in advance the instructions of the experiments or any additional information provided by the laboratory director or the faculty.
Since the laboratory assistant is the link between the student and the lecturer, he/she should usually keep regular office hours to meet students need, and their duties are summarized as follows:

1. The laboratory assistant is directly responsible for all the contents of the laboratory assigned to him and is considered custody in his capacity and must take care of its maintenance and preservation.
2. Processing samples for experiments and using the necessary laboratory equipment, such as microscopes, test tubes, calibration glass bottles, etc., and the number of chemical solutions and fixed and real-time reagents that are always used during laboratory work procedures.
3. Laboratory assistants must abide by laboratory dress codes, while working and pulling hair for females and students are also required to dress in the laboratory and wear protective equipment, such as safety goggles during experiments or paws.
4. Preparing accurate laboratory records, including laboratory inventory, taking notes and keeping them, and carrying out basic administrative tasks such as entering information and recording student attendance.
5. Compliance with the correct laboratory procedures, processes, methodologies, policies and health and safety instructions approved by the University, it should also install all the glass covers of chemical reagents tightly to prevent leakage, and return all reagents and equipment to their designated areas after the end of the lesson.
6. Conduct practical and applied tests and how to analyse and document special results before the experiment date to confirm the expected results and according to the guidance of the competent professor.
7. Cleaning and disinfection of equipment and work area if required, including water baths, incubators, storage tanks, glass and plastic wares, as well as the management of laboratory waste, including garbage, recyclable materials and biological hazards, including safe and scientific sterilization.
8. Monitoring laboratory tests with faculty members during experiments by students, including immunology, chemistry, haematology, microbiology, etc. that require caution, prevention and safe destruction to prevent the spread of infection.
9. Accurately classify and name samples and distribute them to students during the trials of the initial studies assigned to them and according to the guidance of the competent professor.
10. Organization and maintenance of archived laboratory samples, organization of documents and observations.
11. Keeping an inventory of chemicals and laboratory equipment. He requested compensation for consumables and the restocking of materials in specific and

appropriate locations in the laboratory; Working with the resource management team to use the reserve room.

12. To ensure that the laboratory is provided with the necessary and periodic supplies, including fixed and consumables, and monitor all the supplies used in the laboratory.
13. Helping students to conduct laboratory experiments, correct unsafe and vulnerable laboratory practices, and answer students' questions related to experiments, direct and monitors students and ensures that they do not engage in unsafe or dangerous behaviour in the laboratory.
14. Get rid of broken glassware, hazardous waste, Non-hazardous waste, and chemical waste safely within the places designated for them.
15. Report any malfunctions in both devices and supplies and continue to maintain them.
16. It is important for the laboratory assistant to request any clarification before the laboratory begins to be familiar with the work.
17. Provide assistance to undergraduate students or others in the case of the use of laboratory equipment which is under his custody.
18. To learn about modern technologies and use computers in the preservation and analysis of programs and apply them periodically.
19. Perform the additional tasks assigned to them by the department or university administration.

1.8. Animal House Care Worker

Animal care worker should care for a variety of animals involved in research programs. They are responsible for providing basic care to lab animals such as mice and rats.

The duties typically include:

- Cleans and sanitizes cages according to prescribed standards.
- Observes animals on a daily basis to assess health, environmental conditions, and monitors animals for impact of research.
- Supplying animals with food and water.
- Facilitating reproduction of animals in the colony, when required.
- Recording detailed information about each animal’s weight, size, diet, and behaviour.
- Maintaining database records.
- Collecting and analysing data.
- Taking samples and compiling results.
- Maintains cage cards, animal histories, and other records as required.
- Receives and verifies shipments against purchase orders, bills of lading, and other documents; stores animal feed and supplies in a neat and orderly manner; rotates feed as required to ensure freshness; monitors feed supplies to ensure adequate availability.
- Maintains lab, storage areas, and treatment rooms on a daily basis including sweeping and mopping floors; sanitizes equipment and instruments according to established procedures.

- Performs routine maintenance and/or basic mechanical repair to mobile caging, racks, tables, and automatic watering equipment.
- Practice safety, environmental, and/or infection control methods.
- Taking inventory of supplies.
- Performs miscellaneous job-related duties as assigned.
- May also assist researchers with handling animals for examinations and procedures.

1.9. Laboratories Supervisor

This person is responsible for all laboratories of the University. The duties include:

- Check for instructional laboratories and preparation areas to ensure compliance with university regulations and policies.
- Supervise activities of lab assistants, and work study students in all labs.
- The supervisor should coordinate and maintains all Lab facilities and equipment.
- Be responsible for supervising all the Laboratory assistants.
- Serves as the health and safety officer for all the labs.
- Maintains monitors, ensures proper security of and performs minor repairs on scientific laboratory equipment and is responsible for the maintenance of this equipment.
- Supervises and assists in clean-up and disassembly of laboratory equipment.
- Determines equipment, supplies, and physical set-up of each experiment.
- Assigns and/or recommends lab assistants to selected undergraduate laboratory sections; writes performance evaluations and makes recommendations to faculty member.
- Performs special projects as needed or assigned, such as special workshops, exhibits.
- Oversight and enforcement of waste and safety policies and safety training of students and personnel in the labs.
- Assists in designing lab experiments; develops and pre-tests lab experiments and analyses procedures for intended results.
- Evaluates effectiveness of lab experiments to determine student comprehension of theory and principles, in consultation with lab instructors; makes modifications as appropriate.
- Monitors teaching laboratories, in assigned area of responsibility, resolving problems as they arise and making changes as needed to achieve intended results.
- Conducts meetings to introduce, demonstrate and explain experiments to lab assistants, and to resolve problems encountered in previous experiments. Orders all laboratory equipment and supplies, processing all necessary paperwork and maintaining appropriate records. Closely monitors all related purchasing and shipping problems.
- Prepares lab handouts and/or lab manuals, with responsibility for accuracy of information and clarity of theory and principles to be demonstrated in consultation with faculty and arranges for copies for student.
- Assists with inventory management of reagents and supplies
- Performs related duties as required.

1.10. All Students and Employees

Each student and every employee are responsible for the safety of their own actions, both for themselves and for their co-workers. They are also responsible for attending all training and informational meetings as requested, following proper work procedures, wearing assigned or required personnel protective equipment, and reporting all hazardous conditions and incidents to their supervisor, instructor, or other applicable person. Employees are also expected to participate in the development of safe work procedures and methods of protecting the environment through their involvement with safety committees or other means of providing feedback to the University.

1.11. Environmental Health and Safety

Environmental Health and Safety provides technical support to assist the University administration in developing and implementing a safety, health, and environmental program and evaluating its effectiveness. Environmental Health and Safety responsibilities include:

- Acting as a University liaison with local and state regulatory agencies.
- Keeping those responsible for compliance informed of changes in safety, health, and environmental regulations.
- Providing the technical resources needed by the University to protect the safety and health of students and employees.
- Maintaining the safety, health, and environmental records necessary to document the University's programs and as required by specific regulations.

1.12. Immunization

People working with infectious organisms, blood or bodily fluids or in animal holding facilities should routinely review their need for immunization against preventable disease. Additionally, people who are immunosuppressed, immune compromised or involved in any of the following activities should consider their need for immunization:

- Field work
- Working with waste or contaminated water or soil
- Working with animals or insects
- First aid administration

It is mandatory for Chief Investigators to undertake a thorough risk management assessment to identify risks specific to any human pathogen brought into a facility and to which they or other research members may be exposed.

2. Emergency Action and Fire Prevention Plan

This section contains general emergency response procedures to be followed in the absence of department- or facility-specific procedures. The supervisor or person responsible for the area where an emergency occurs is responsible for investigating all emergency incidents and reporting them to Environmental Health and Safety.

2.1. Building Evacuations

There are several types of actual and potential emergency situations that might necessitate a building evacuation including fire, explosion, chemical spill, gas leak, terrorist threats, etc. The evacuation alarm is primarily intended for initiating a general evacuation during fire emergencies. During emergencies other than fire, the possibility that occupants could enter a danger area (e.g., chemical spill in exit path, potential explosion area, exposure to gunman, etc.) while exiting the building should be considered before initiating the evacuation alarm. In those instances where a general evacuation is not safe, the evacuation will have to be conducted room by room in buildings that do not have a public address system.

2.1.1. Instructor Responsibilities

At the start of each academic semester, instructional staff are required to instruct students and other personnel who are occupying the instructor's area of responsibility on the proper procedures to follow in case the building must be evacuated. The following information must be included in the instructions:

1. The signal to evacuate the building in case of emergency is the building fire alarm.
2. Location of exits nearest to the classroom/lab. It is the instructor's responsibility to point out exit paths to students. Exit routes have been posted in all classrooms, class labs, and research labs.
3. Certain safety precautions that may be necessary before actually departing, such as: making experiments/reactions safe, shutting off gas, etc., if it is safe to do so.
4. Building elevators are not to be used for evacuation.
5. Evacuees are not to congregate in or around the building exits or doorways, evacuees must be at least 100 feet away from the building. A designated assembly area shall be determined by the instructor.
6. It is the responsibility of instructors to notify students in each class of the need to identify themselves (in private, if desired) if they will need assistance during a building evacuation due to disability, and to establish an evacuation plan for those identified. Such evacuation plans may include the buddy system and the use of safe refuge areas-places relatively resistant to smoke and heat within a building (for example a sprinkler protected room or hallway, or a stairway landing) where an occupant could wait until help arrives to assist in an evacuation.
7. Persons physically unable to evacuate are to be assisted to a designated safe refuge area (usually the landing of an enclosed stairway or a sprinkler protected corridor) if evacuation is necessary from other than a ground level floor. The assistant shall then evacuate and direct fire fighters to the location of the safe refuge area in use.
   Personnel may re-enter the building only when the Public Safety Officer at the scene of the emergency situation gives the "All Clear."

2.2. Building Fires

1. Initiate a building evacuation using the nearest alarm pull station.
2. Request fire department assistance.
3. If the fire is small and you have been trained in the use of portable fire extinguishers, you may attempt to extinguish the fire.
4. Use the nearest safe exit route to exit the building. Close all doors on the way out to prevent the spread of smoke and fire.
5. After exiting, immediately proceed to a safe location at least 100 feet from the building.

6. Do not re-enter the building until the all-clear is given by Public Safety or the fire department.

2.3. Medical Emergencies

1. Evaluate the immediate area for potential safety hazards (fire, toxic or explosive gas vapors, etc.) or situations that may require moving the injured to a safer location. Otherwise move the injured no more than necessary.
2. Notify Public Safety and request first aid assistance or an ambulance.
3. Provide emergency first aid as needed if you have been trained to do so.
4. If the injury involves exposure to a hazardous chemical, provide the Material Safety Data Sheet to the medical emergency responders. If the MSDS cannot be located in time, call the emergency room to offer the information as soon as possible.

2.4. Chemical Spills

Each employee responsible for an activity involving the use of a hazardous substance must prepare a written procedure to be followed in the event of a spill and communicate the procedure to any students, contractors, visiting scholars and scientists, and employees involved in the activity. The written procedure and associated training must include information on when to request outside assistance.
The following procedures are for chemical spills that cannot be handled safely by persons working in the area.

2.4.1. Developing Written Spill Response Procedures

Individuals that supervise the use or storage of hazardous chemicals and materials **must develop written procedures for responding to a spill of those chemicals and materials.** Spill response procedures must prioritize human health and safety and clearly define the circumstances when a spill can be safely managed by on-site personnel and when it is necessary to seek outside assistance. Supervisors must ensure that everyone who uses hazardous chemicals and materials is trained to manage spills and knows how and when to get outside assistance if necessary.

If a spill or release is immediately dangerous to life or health OR on-site personnel are unable to safely manage the spill, seek outside assistance as described below:

2.4.2. Spill of a Hazardous Chemical or Material Inside a Building

1. Evacuate everyone in the immediate area and close all doors as you leave. If there is a potential risk to others in the building pull the nearest fire alarm to evacuate the building.
2. Call the fire fighters.
   - Give the dispatcher your location: e.g., Cihan University-Erbil, along with the location on campus including the building name and room number.
   - Describe the situation, any injuries, and if there is a fire or potential for a fire.
3. Contact your supervisor. Explain what happened and tell them what is being done in response.

- It is expected that supervisors will ensure that the department safety officer, department Head, and/or dean are aware of the incident.
- If you are unable to contact your supervisor, contact your departmental safety officer or unit leader (Head or Dean).

4. From a safe location, meet campus Public Safety and Police Services (PSPS) and other emergency first responders. Provide them with directions to the location of the spill/release and information about the spilled or released substance including:

- Name of substance(s), quantity released, and any known hazards;
- A copy of the Safety Data Sheet(s), if available;
- Other hazards that may be in the room / area.

2.4.3. Outdoor Spill of a Hazardous Chemical or Material

1. Evacuate anyone in the immediate area.
2. Call the firefighters.

- Give the dispatcher your location: e.g., Cihan University-Erbil, along with a description of location on campus.
- Describe the situation, any injuries, and if there is a fire or potential for a fire.

3. If the hazard is primarily to the environment and the spill is too large to be cleaned up by on-site personnel, including through storm drains, request assistance from Environmental Health and Safety. Do not attempt a cleanup once you have determined that outside assistance is needed, or if the spill has entered the soil, groundwater, or surface water.
4. Contact your supervisor. Explain what happened and tell them what is being done in response.

- It is expected that supervisors will ensure that the department safety officer, department Head, and/or Dean are aware of the incident.
- If you are unable to contact your supervisor, contact your departmental safety officer or unit leader (Head, Dean).

5. Remain a safe distance away from the spill and warn others to stay clear until help arrives.
6. When campus Public Safety and Police Services or other emergency responders arrive, provide directions to the location of the spill and information about the spilled/released substance, including:

- Name of substance(s), quantity released, and any known hazards;
- A copy of the Safety Data Sheet(s), if available;
- Any other hazards in the area.

2.4.4. Management of the Scene During a Spill

1. Public Safety and Police Services (PSPS), local Fire Departments, Cihan University-Erbil staff, and others responding to the spill or release will use established Incident Command/Unified Command structures to manage the active incident.
2. PSPS will secure the area to ensure safety and prevent unauthorized entry, based on guidance from the "Emergency Response Guidebook," and / or consultation with knowledgeable persons at the scene.
3. PSPS will contact Cihan University-Erbil Environmental Health and Safety (EHS) for assistance.

4. Based upon recommendations from EHS and other knowledgeable persons at the scene Incident Command will:
   - Prohibit access to the room / building / outdoor area until the spilled / released material is properly cleaned and the area has been determined safe for general occupancy.
   - Declare the room, building, or area safe for re-entry.

2.4.5. Demobilization After the Spill is Cleaned Up and the Area is Declared Safe

1. EHS will work with PSPS/Incident Commander to ensure any remaining concerns are addressed.
2. Upon clearance for re-entry, PSPS will take the lead in reopening the room / building /area.
3. Incident and Injury Report(s) must be submitted by the supervisor(s), providing details of the incident and documenting any injuries to employees. A separate report must be submitted for each injured employee.
4. An after-action meeting will be convened by EHS for debriefing. This meeting shall be scheduled within 1 week of the incident and shall include all involved parties (Examples Include: EHS, PSPS, the affected department(s), Facilities Management, local Fire, local County Emergency Management, etc.).
5. Following the debriefing and after-action report should be generated outlining steps to be taken to help prevent future incident occurrences, as well as ways to improve the emergency response.

2.5. Building Fire Safety

- Building occupants shall not obstruct or tamper with any safety features such as exit signs, sprinkler systems, heat and smoke detectors, alarm pulls, horns, and strobes, etc.
- Fire doors may not be propped open except with an approved magnetic interlock device.
- Sprinkler heads and pipes may not be used to support decorations or other items and stored materials must be at least eighteen inches below a sprinkler head.
- Flammable and combustible storage shall be in conformance with the applicable sections of this document standards.
- Stairwells shall be kept free of obstructions and shall not be used for storage, recycle containers, vending machines, etc.
- Hallways may not be used for storage of combustible materials, items that could inadvertently be moved into the traffic path during an emergency, or items that reduce the width of the hallway.
- Vending machines may not be located where they will reduce the width of a hallway or other building exit path during refilling operations and may not be located in stairways.
- Items may not be placed in hallways without approval from Facilities Management and Environmental Health and Safety. Cabinets with doors or drawers will not be approved if the open drawer or door reduces the hallway width below the minimum required.
- A minimum 36-inch clear exit aisle must be maintained from each workstation.
- Special events must be planned so that displays and refreshment tables do not obstruct exits or exit access routes.
- Classrooms without fixed seating shall be set up to allow access to the exit door(s) from each row of seats and seating may not exceed 49 in rooms with a single exit.

- Additional occupants may not be accommodated in aisles, exit paths, or other portions of classrooms and other assembly areas provided with fixed seating.
- Open flames are permitted only in laboratories and other designated hot work areas unless a hot work permit is obtained.
- Lighted candles are not permitted except in supervised dining areas, provided they are securely supported on a noncombustible base and the flame is protected.
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2.5.1. Decorations in Buildings Other Than Residence Halls and Apartments

- Decorated artificial trees may be set up indoors and displayed during Christmas days.
- The use of cut natural trees is not permitted without approval from Environmental Health and Safety.
- Electric lights and lighted decorations must bear the Underwriters Laboratories seal and must be turned off when the room or space is not occupied.
- Decorations must be located so that they do not obstruct any exits, hallways, stairs, or firefighting equipment from view or use. No lights or lighted decorations may be placed on or near an exit sign.
- Electric lights may not be placed on an all-metallic tree or other metallic structure.
- Combustible decorations may not be placed in stairwells and should be kept to a minimum in corridors.
- Lighted candles are not permitted except in supervised dining areas, provided they are securely supported on a noncombustible base and the flame is protected.

3. Safety, Health, and Environmental Policies
3.1. Government Regulations

Policy: Cihan University-Erbil will comply with all state and local safety, health, and environmental regulations.

Additional Information: Due to the large number of these regulations, it is not feasible to list or summarize them here. Environmental Health and Safety is responsible for communicating the requirements of these regulations to appropriate University departments and employees on behalf of the University administration and for making them available to students and employees as needed.

3.2. Children in the Workplace

Definition
Children: Persons under the age of 18.

Policy: To ensure the safety of all children, it is University policy that children under the age of 12 are permitted in the workplace (such as offices, classrooms), with prior approval of the department head, manager, or director and in accordance with the guidelines below. Children age 12 and under who are not enrolled in a Cihan University-Erbil class or program are not allowed in laboratories at any time.
The following rules apply to ensure the child's safety and to respect others working in the space:

1. The child must be under the parent or guardian's supervision at all times and must not be unaccompanied
2. The child must not have access to any laboratory or other hazardous areas.
3. The child must not be disruptive to others in the work place.
4. Appropriate measures must be taken to ensure the privacy of the personal information if the child is in the workplace.
5. Individual's age 13-18 must, at all times, be under the direct supervision of the designated laboratory supervisor while visiting laboratories containing hazardous chemicals or equipment.

3.3. Employees and Graduate Students Leaving the University or Department Transfers

Policy: Prior to leaving the University or transferring to another department, academic employees and graduate students must complete a workspace cleanout form. Department Heads and/or Deans are responsible for ensuring that the form is completed correctly and that each employee or graduate student has properly disposed of all waste materials from their office, laboratory, shop and/or other work or storage areas. Waste materials include but are not limited to chemical and hazardous waste, scrap, raw materials, product samples, and laboratory/research samples. Any equipment, unused chemicals, laboratory/samples, etc., that are not disposed of must be transferred to another responsible member of the department as indicated on the cleanout form. A digital copy of the completed and signed workspace cleanout form is submitted according to instruction provided on the form. A hard copy of the completed and signed form will be kept on file with the department.

3.4. Donations of Chemicals and Waste Minimization

Policy: Donations of laboratory chemicals, or substances which would be subject to Cihan University-Erbil Hazardous Waste regulations at the time of disposal, shall not be accepted without approval by the Director of Environmental Health and Safety and shall not exceed the quantity necessary for use in an ongoing project.

Additional Information: Minimization of chemical waste is in the best interest of the lecturers and staff as well as the University. Excessive laboratory waste production diverts valuable funds away from more productive activities and increases the regulatory compliance burden on the University. Because there is a direct correlation between the total University chemical inventory and our total waste production, waste minimization must begin with chemical inventory minimization. Chemicals should be acquired in the amounts needed for a specific project and not simply to have on hand. Current purchase and delivery services make this practice unnecessary and waste disposal costs make the practice short sighted. Effective methods to minimize laboratory waste include micro- or reduced-scale experiments, just-in-time delivery for reagents, good housekeeping, proper labeling, prompt disposal, and ordering only what is needed for the project.

3.5. Building Construction and Renovation

Policy: All proposed projects involving changes in use, alterations, construction, or additions to buildings or spaces owned or operated by Cihan University-Erbil shall be approved in writing for adequacy of utilities and life safety by Facilities Management and Environmental

Health and Safety prior to requesting a purchase order, funding, or construction bid proposal. Facilities Management and Environmental Health and Safety will also conduct a physical space review before a new or renovated space may be occupied.

Additional Information: Departments or individuals considering a potential building renovation or alteration should contact Facilities Management, which is responsible for the administration of these activities.

3.6. Headsets

Policy: All University employees are prohibited from wearing portable stereo headsets or any other devices that may limit the hearing capabilities of the employee while on the job. This does not include protective devices that are required for hearing safety.

3.7. Student Projects

Policy: A hazard analysis shall be completed for each student project. Students working on projects shall complete a hazard analysis for the proposed project to identify hazards, evaluate the potential risks connected with the hazards and determine appropriate ways to eliminate the hazards and/or control the risks. This shall be done during the early planning stages of the project and continually re-evaluated with the implementation of new procedures, tools, equipment, processes, materials, chemicals, etc. Students shall also commit to following safe working procedures and sharing the responsibility for safety with other members of the project team.

Advisors of student projects shall, oversee the hazard analysis process for evaluating the health, safety and environmental hazards associated with the project and ensure that appropriate methods are used to mitigate risks connected with these hazards. Advisors are encouraged, as needed, to enlist the help and support of departmental or other University systems and personnel with knowledge and expertise related to the project.

This policy applies to projects where work is conducted without the immediate and direct supervision by University staff.

4. Safety Committees

Safety committees review and approve certain activities that involve safety and health regulations and guidelines. Committees are composed of staff and employees involved in the activity and other experts as required. Examples of these safety committees include:

Institutional Review Board (IRB)—For research or instructional projects involving the participation of human subjects. Required by federal law for research involving human subjects. The executive director of Research Integrity appoints members.

Institutional Biosafety Committee—For research, teaching, and testing involving recombinant DNA and other biological organisms and materials. Required by the National Institutes of Health. The executive director of Research Integrity appoints members.

Institutional Animal Care and Use Committee (IACUC)—For testing or instructional projects involving the use of vertebrate animals (animal subjects). Required by federal law for research involving animal subjects. The executive director of Research Integrity appoints members.

Radiation Safety Committee—Required by the Nuclear Regulatory Commission for possession or storage of licensed radioisotopes. Existing committee members appoint new members.
University Safety Advisory Council—Reviews safety, health, and environmental issues related to the University and makes recommendations to the Executive Director of Research Integrity. The executive director of Research Integrity appoints members.
Department Safety Committees—Large departments with complex safety, health, or environmental issues should have a department safety committee composed of employee and management representatives. These committees can perform area inspections, develop safe work practices and procedures, and host activities that enhance the department safety program. Each department determines membership.

5. General Safety

5.1. Personal Protective Equipment

University students and employees may be required to wear personal protective equipment (PPE) as identified by department safety plans, job-hazard analyses, posted signs, written procedures, or regulatory requirements. It is the responsibility of all employees and students to wear the required personal protective equipment. It is the responsibility of the staff/supervisor to make it available to employees, as well as students, contractors, vendors, and visitors, and to ensure that it is worn where required.

5.1.1. Selection of Personal Protective Equipment

Personal protective equipment requirements must be determined for each job or task assignment and will be determined by the supervisor or staff member in charge with assistance from Environmental Health and Safety as needed or required. This determination must be documented in writing by the supervisor and a copy kept on file in the Environmental Health and Safety office. Once the appropriate PPE has been determined, its use is mandatory. It is the responsibility of the supervisor to ensure that proper training or other required prequalification has been implemented before the student or employee begins a task for which PPE is required. The following guidelines are intended to assist the supervisor in selecting appropriate PPE.

5.1.2. Eye and Face Protection

Each affected person shall use appropriate eye or face protection if a hazard exists due to any of the following:

- Flying objects or particles
- Moving or dangling objects like slings and chains
- Dusts and mists
- Molten metal
- Liquid chemicals
- Acids or caustic liquids
- Chemical gases or vapors
- Glare
- Injurious radiation
- Electrical flash

- Any combination of the above hazards

  Side protection shall be used whenever there is a hazard from flying objects. Spectacles without side shields are allowable for frontal protection only (it should be noted that this situation would be extremely unlikely).

  A face or eye protector shall be in compliance with all of the following minimum requirements:
- It shall protect against the particular hazards for which it is designed.
- It shall fit snugly and shall not unduly interfere with movements of the wearer.
- It shall be capable of withstanding sanitizing.
- Care shall be taken to recognize the possibility of multiple and simultaneous exposure to a variety of hazards.
- Adequate protection against the highest level of hazard must be provided when multiple hazards are present.
- Operations involving heat may also involve optical radiation. Protection from both hazards shall be provided.
- Safety glasses or goggles must be worn under face shields.
- Persons whose vision requires the use of prescription lenses shall wear either protective devices fitted with prescription lenses or protective devices designed to be worn over regular prescription eyewear.
- Wearers of contact lenses shall also be required to wear appropriate eye and face protection devices in a hazardous environment.
- Caution should be exercised in the use of metal frame protection devices in electrical hazard areas.
- Welding helmets or hand shields shall be used only over primary eye protection.

5.1.3. Hand Protection

Each affected person shall use appropriate hand protection when their hands are exposed to hazards that may cause any of the following:
- Skin absorption of harmful substances
- Severe cuts or lacerations
- Severe abrasions
- Punctures
- Chemical burns
- Thermal burns
- Harmful temperature extremes

  Selection of the appropriate hand protection shall be based on an evaluation of the performance characteristics of the hand protection relative to all of the following:
- The task to be performed
- Conditions present
- Duration of use
- The hazards and potential hazards identified

  Selection of chemical-resistant gloves should be based on manufacturer-specific permeation and degradation data when prolonged contact is expected.

5.1.4. Head Protection

Each affected person shall be provided with, and shall wear, head protection equipment and accessories in areas where a hazard exists from falling or flying objects, other harmful contacts or exposures, or where there is a risk of injury from electric shock, hair entanglement, chemicals, or temperature extremes.

Head protection equipment that has been physically altered or damaged shall not be worn or reissued to a student or employee.

Protective helmets or safety hats and caps shall be of the following types:

- Class-A—Limited voltage protection
- Class-B—High voltage protection
- Class-C—No voltage protection

A Class-C helmet or any metallic head device shall not be furnished or used for head protection, except where it has been determined that the use of other types of protective helmets or safety hats or caps is impractical, such as where chemical reaction will cause the deterioration of other types of head protection.

Bump hats or caps or other limited-protection devices shall not be used as a substitute for protective helmets for the hazards described in this section.

A hat, cap, or net shall be used by a person where there is a danger of hair entanglement in moving machinery or equipment, or where there is exposure to means of ignition. It shall be designed to be reasonably comfortable to the wearer, completely enclose all loose hair, and be adjustable to accommodate all head sizes. Material used for a hair enclosure shall be fast dyed, nonirritating to the skin when subjected to perspiration, and capable of withstanding frequent cleaning. It shall not be reissued from one person to another unless it has been thoroughly sanitized.

5.1.5. Hearing Protection

When a noise exposure of 85 dBA (an environment where normal speech levels cannot be understood) is exceeded for any eight-hour time period, a hearing conservation program shall be established. If there are concerns that this action level of 85 dBA may be exceeded, Environmental Health and Safety should be contacted to make noise measurements and to assist in selecting appropriate noise abatement measures and establishing a hearing conservation program, if necessary.

5.1.6. Foot Protection

Each affected person shall wear protective footwear when working in areas where their feet are exposed to electrical hazards or where there is a danger of foot injuries due to falling or rolling objects or a danger of objects piercing the sole of the shoe. Safety shoes and boots which are not worn over shoes and which are worn by more than one person shall be maintained, cleaned, and sanitized inside and out before being reissued.

Where a hazard is created from a process, environment, chemical, or mechanical irritant that would cause an injury or impairment to the feet by absorption or physical contact—other than from impact—footwear, such as boots, overshoes, rubbers, wooden-soled shoes, or their equivalent, shall be used.

5.1.7. Respiratory Protection

Selection of respiratory protection is solely the responsibility of Environmental Health and Safety. Any person who suspects the presence of a hazardous air contaminant must request assistance and obtain approval from Environmental Health and Safety before selecting, or using, a respirator or dust mask.

5.2. Working Alone

Students, contractors, visiting scholars and scientists, and employees may not work alone if the work involves exposure to hazards that are potentially life threatening, could inhibit self-rescue, could cause injuries requiring immediate assistance, or pose a fire or explosion hazard beyond the person's ability to respond effectively. Appropriate methods to address the need to perform such hazardous operations include the buddy system, intercom communication to a nearby area, periodic supervisor inspections, periodic phone contacts, etc., as long as the method implemented is appropriate to the level of hazard and the required response time in the event of an incident. Each department is responsible for establishing a system and criteria for approving requests to work alone.

5.3. Hot Work

Hot work is any temporary activity involving an open flame or that produces heat, sparks, or hot slag. This includes, but is not limited to, brazing, cutting, grinding, soldering, thawing pipes, torch-applied roofing, and welding. Such activities will require the issuance of a Hot Work Permit before beginning hot work.

5.4. Exposure to Blood-borne Infectious Diseases

Each department must determine if they have employees whose required job duties result in actual, or reasonably likely, exposures to human blood or other potentially infectious body fluids. If so, a blood-borne infectious diseases program must be established to protect them from exposure. The program will include a written compliance plan, employee training, the use of universal precautions, personal protective equipment, engineering controls, and offering the hepatitis-B vaccination series.

Employees who believe that their required job duties involve exposure to blood or other infectious materials should contact their supervisor to see if they should be part of the department blood-borne infectious diseases program. If the department does not have an existing blood-borne infectious diseases program, the supervisor should contact Environmental Health and Safety for information and assistance in determining whether a program is needed.

5.5. Asbestos in Buildings

Several buildings were constructed using a variety of products containing asbestos fibers. These products most commonly include structural steel fire insulation, steam pipe fitting insulation, and floor tiles.

Wherever asbestos-containing insulation is located above a suspended ceiling, only authorized and trained employees may lift or remove the ceiling tiles for any purpose.

Maintenance or other procedures that have the potential for releasing asbestos fibers are not allowed except under controlled conditions by trained and authorized employees.
It is the responsibility of each department to inform employees of the existence and location of asbestos-containing products in their work areas and the health reasons for avoiding contact with, or disturbance of, asbestos fibers. Department officials should contact Facilities Management for information on the types and locations of asbestos-containing materials in their building.

5.6. Safety and Health Training

Each department shall be responsible for providing safety orientation training for each new employee within five days of their start date. Additional training must also be provided as required for specific tasks and, depending on the task, may be required before the employee is permitted to begin work.

5.6.1. Training Responsibilities

- Individual department Heads, Deans of Colleges, and directors are responsible for ensuring that safety training is provided for all employees, as appropriate.
- Supervisors and staff members are responsible for providing training to employees and students under their supervision and are responsible for requesting Environmental Health and Safety assistance when needed.
- Employee supervisors are required to attend all safety training provided for their employees.
- Environmental Health and Safety is responsible for providing the safety portion of the training associated with the use of forklifts, respirators, portable fire extinguishers, shipping and receiving dangerous goods, and asbestos work. Other training may be requested on a case-by-case basis.

5.6.2. Qualifications, Training Content, and Record Keeping

Except where the qualifications of the trainer are specified in a regulation or standard, department Heads may assign training duties to knowledgeable employees as appropriate. Likewise, the content of the training may be determined by the trainer, except where specified in a regulation or standard.
Environmental Health and Safety should be consulted to determine whether the training content is specified under a particular regulation and can assist with content and training materials and aids.
All safety training shall be documented in writing and a record retained for a period of no less than two years for annual training and for the duration of employment for one-time training.

5.6.3. Training Topics

Every employee, including student, temporary, and part-time employees, shall be given safety orientation training before beginning any job assignments. The safety orientation should include general information about emergency response procedures, how to report injuries, how to obtain emergency assistance, and how to get additional safety information.

Additional training may be required by specific safety and health standards before an employee is assigned to perform tasks covered under the standard. Examples include heavy equipment operation, electrical work, exposure to blood-borne pathogens, work with radioisotopes, chemical laboratory work, respirator use, hazardous materials shipping and receiving, and many others.
All departments are responsible for contacting Environmental Health and Safety to assist them in determining what type of safety training is required and appropriate for their employees.

5.7. Incident and Injury Investigations and Reporting

Supervisors, including staff, laboratory managers, office managers, etc., are responsible for investigating and reporting incidents involving injury or property loss in their area as well as close calls or "near misses." The supervisor will complete a Supervisor's Incident and Injury Investigation Report and submit a copy to Environmental Health and Safety. The form also serves as a helpful investigation guide.
Incident investigations typically involve a review of the location as well as interviews of all who were involved in or observed the incident. Emphasis should be placed on identifying the underlying causes of the incident rather than placing blame. The investigation is not considered complete until all actions that will prevent recurrences have been identified. Corrective actions taken as a result of the investigation should be documented.
If the injured employee, including student employees, requires medical attention, a copy of the Workers Compensation Return to Work Form should be filled out by the physician after completing the examination and submitted to Environmental Health and Safety. The supervisor may insist that an injured employee be seen by a doctor if in his/her judgment it is prudent to do so. Injuries to students during class activities or on University property should also be reported, however, students may not be forced to accept medical treatment.
All employee fatalities must be reported to Environmental Health and Safety immediately, regardless of cause.

6. Storage and Handling of Hazardous Materials

The use and storage of hazardous materials is regulated by the Cihan University-Erbil Right to Know Law, also called the Hazard Communication Standard. The Right to Know Law affects nearly every employee at the University because it applies to the use of all chemicals or products that have a documented safety or health hazard. Such substances include toners and cleaners used in office environments, janitorial supplies, lubricants, welding electrodes and gases, metal stock, etc.

6.1. The University Hazard Communication Plan

The University Hazard Communication Plan requires containers to be properly labeled and Material Safety Data Sheets to be maintained in an organized collection and available at all times to employees in each work area. It also requires each employee to be trained in the interpretation of Material Safety Data Sheets, the protective measures to be taken, the symptoms of exposure, and other information related to the substances they use.

6.2. Flammable Liquids Outside of Laboratories

Storage of flammable liquids in buildings shall be limited to that required for the operation of office equipment, maintenance, and classroom demonstrations in addition to the following restrictions:

- Containers of Class IA liquids shall not exceed one pint capacity for glass containers, one gallon capacity for metal, or two gallons capacity for safety cans.
- Containers of Class IB liquids shall not exceed one quart capacity for glass containers, one gallon capacity for metal, or two gallons capacity for safety cans.
- Containers of Class IC liquids shall not exceed one gallon capacity for glass containers, one gallon capacity for metal, or two gallons capacity for safety cans.
- Containers of combustible liquids shall not exceed one gallon capacity for glass containers or five gallons capacity for metal containers and safety cans.
- Not more than ten gallons (or 25 gallons in safety cans) of Class I and combustible liquids combined shall be stored in a single fire area outside of a UL-listed or FM-approved storage cabinet or an inside flammable liquids storage area.
- **Definitions:** *Class IA flammable liquid*—a liquid having a flash point below 73°F (22.8°C) and having a boiling point below 100°F (37.7°C). *Class IB flammable liquid*—a liquid having a flash point below 73°F (22.8°C) and having a boiling point at or above 100°F (37.7°C). *Class IC flammable liquid*—a liquid having a flash point at or above 73°F (22.8°C) and below 100°F (37.7°C). *Combustible liquid*—a liquid having a flash point at or above 100°F.

6.3. Compressed Gases

Compressed gas cylinders, either empty or full, shall be used, handled, and stored in accordance with the following:

- Compressed gases cylinders must be stored in a vertical position and may not be stored in hallways, stairwells, receiving areas, or locations where they are subject to damage.
- A chain, bracket, clamp, or other restraining device shall be used at all times to prevent cylinders from falling.
- Acetylene or liquefied gas cylinders shall not be placed on their sides, but shall be stood valve-end up.
- A cylinder, whether empty or full, shall not be used as a roller or as a support.
- A cylinder, whether empty or full, in storage or during shipment, shall have the valve closed and cap connected in place, if a cap is provided in the design, or the valve shall be otherwise protected.
- Cylinders shall be marked with either the chemical or trade name. Marking shall be by stenciling, stamping, or labeling and shall not be tampered with or be readily removable. If the labeling is unclear or defaced, return the cylinder or obtain a new label from the supplier. Unlabeled cylinders shall not be used.
- Empty cylinders shall be marked “empty” at time of depletion.
- Cylinders of oxidizers such as oxygen shall be stored at least 20 feet from fuel gas cylinders or a highly combustible material such as, but not limited to, oil, grease, flammable gas or a source of ignition, or be separated from the material by a noncombustible wall, not less than five feet high, having a fire resistance rating of one hour. All cylinders shall be stored away from heat in excess of 125°F.
- Where different gases are stored, they shall be grouped by types. Groupings shall separate the flammable gases from the oxidizing gases.

- Storage shall be set up to ensure “first-in, first-out” usage.
- A cylinder storage area shall be posted with the names of the individual gases stocked, and a warning posted against tampering by an unauthorized employee. An assigned storage area shall be located where a cylinder will not be knocked over or struck by a passing or falling object.
- A storage area for cylinders shall be well ventilated. A cylinder shall not be stored in basements or pits except where appropriate ventilation is furnished to keep the area purged of any accumulation of gases.
- Cylinders shall be transported in an upright position and securely fastened by a restraining device to the truck or handcart. Approved handcarts are to be used when transporting cylinders within a building.
- When transported, the regulator must be removed and the protective cap replaced.
- A cylinder shall not be dropped, dragged, rolled on its side, or struck violently.
- A cylinder shall be lifted only by enclosed platforms when using a crane or hoisting device. Electromagnets, ropes, or slings shall not be used.
- When transporting cylinders in an elevator, other passengers should not be allowed to occupy the elevator.
- Use cylinders in an upright position and secure them firmly with chains or clamps.
- Do not use a cylinder of compressed gas without reducing the pressure through a regulator attached to the cylinder valve.
- Use regulators and pressure gauges only with gas for which they were designed and intended. Do not use adapters or modify connectors to circumvent this rule.
- Make sure the threads on a regulator or union correspond with those on the cylinder valve outlet. Do not force mismatched connections.
- Never use oil or grease on valves or attachments for oxygen cylinders. Avoid handling oxygen cylinders and apparatus with oily hands, gloves, or clothing.
- Open cylinder valves slowly with valve outlet directed away from personnel. Close the main cylinder valve as soon as it is no longer necessary to have it open.
- Gases shall not be mixed within a cylinder except by the supplier.
- A cylinder shall not be placed where it will become a part of the electrical circuit by accidental grounding or where it may be burned by electric welding arc. A cylinder shall not be placed so that hot slag or flame will reach it or it shall be protected by a fire-resistant shield. An electrode shall not be tapped against a cylinder to strike an arc.
- A frozen or ice-clogged valve shall be thawed either by warm air or use of warm water and dried before using. Boiling water or a flame shall not be used. Force shall not be applied to a valve or cap to loosen a cylinder frozen in place.
- A cylinder without fixed hand wheels shall have keys, handles, or non-adjustable wrenches on valve stems while in service. A multiple cylinder installation shall require only one key or handle for each manifold. A hammer shall not be used to open a cylinder valve or loosen a cap.
- A leaking cylinder or a cylinder with a valve stuck open or a valve in need of repair shall be taken outdoors-if it is safe to do so-away from sources of ignition, slowly emptied, tagged with a warning sign, and the manufacturer or distributor notified. Complete removal of the stem from the cylinder valve shall be avoided.
- Nothing shall be placed on top of a cylinder that would damage a safety device or interfere with the quick closing of the valve.
- Return empty cylinders to the vendor as soon as possible.

6.4. Labeling Requirements for Hazardous Chemicals

Hazardous chemicals subject to this labeling policy include any chemical which is classified as a physical hazard or a health hazard, a simple asphyxiant, combustible dust, pyrophoric gas, or hazard not otherwise classified. This policy does not apply to hazardous chemicals that remain inside of a chemical laboratory where the labeling requirements of the written laboratory chemical hygiene plan apply.

1. The hazard communication standard requires labels on all original containers received from the manufacturer or vendor to have the following information:

a. Product identifier (chemical or product name)

b. Signal word (“danger” or “warning” – "Danger" is used for the more severe hazards, while "warning" is used for the less severe hazards)

c. Hazard statement(s) (a statement assigned to a hazard class and category that describes the nature of the hazard(s))

d. Pictograms(s)

e. Precautionary statement(s), and

f. Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party

These labels may not be removed or defaced while the substance is in the workplace. If part or all of the information on the label becomes illegible, a new label with the same information must be created and affixed to the container.

It is recommended that containers be dated on receipt and working containers be dated when filled or topped off. This helps prevent the expiration of older stock and assists in disposal decisions.

2. Secondary container labels (portable containers, spray bottles, sample bottles, flasks, etc., containing the original substance, working solutions, or mixtures) must have the following information:

a. Either the items listed in 1), above, or:

b. The hazardous chemical name(s) [the names must be the same as those used on the original container and the SDS] and a written description or GHS pictograms showing the hazard(s) present. Mixtures and solutions must include the names and concentrations of all components in the container, for example, 10% Clorox Bleach in water or 5 molar hydrochloric acid.

Secondary container labels must be legible and durable so that the information cannot be easily washed off or stained. If part or all of the information on the label becomes illegible, a new label with the same information must be created and affixed to the container.

Example label in accordance with 2) b), above:

10% Clorox Bleach in water

Causes mild skin irritation and serious eye irritation

7. Environmental Protection

7.1. Waste Disposal

Numerous types of wastes are generated at the University, and their disposal is regulated under a variety of federal, state, and local laws and regulations. The following is a general description of most waste streams and how they are regulated and disposed of. Environmental Health and Safety should be contacted for specific information regarding proper waste disposal procedures.

7.1.1. Office Waste

Cihan University-Erbil solid waste rules regulate the disposal of solid office waste, which includes such things as paper, cardboard, textiles, etc. These items may be placed in wastebaskets and the large trash receptacles outside each building. Office equipment and machines, furniture, and liquid wastes may not be disposed of in these office waste receptacles.

7.1.2. Sewer Waste

The City of Erbil municipal waste ordinance regulates the disposal of wastewater from kitchens, bathrooms, and work areas and imposes to have septic tanks in the University. Solvents, cleaners, and other substances that are not intended for use in the fixtures connected to the sewerage system may not be disposed of in any drain without prior approval from Environmental Health and Safety.

7.1.3. Old Furniture and Equipment

Cihan University-Erbil solid waste rules for scrap metals apply to the disposal of metal furniture and equipment or components. As long as the scrap does not include other regulated substances like mercury, PCBs, or oil, it can be disposed of by contacting the disposal company for removal. Also contact the disposal company for disposal of wood or plastic furniture and large pieces of wood. Equipment or components containing circuit boards, cathode ray tubes, mercury, PCBs, or other hazardous substances may not be disposed of with other materials in this category.

7.1.4. Lighting, Computers, and Monitors

Cihan University-Erbil's Universal Waste Rules regulate the disposal of computers, video monitors, televisions, and fluorescent lights. Facilities Management coordinates the disposal of all fluorescent light tubes at the University unless they are broken. Broken fluorescent light tubes are disposed of as hazardous waste through Environmental Health and Safety.

7.1.5. Laboratory Waste

Laboratories generate a number of waste streams that include medical waste, hazardous waste, liquid industrial waste, broken glassware, empty containers, chemical spill cleanup debris, and supplies. Prior approval must be obtained from Environmental Health and Safety before any laboratory waste, except for office-type wastes, may be disposed in drains or placed in wastebaskets or outdoor receptacles.

Once appropriate waste collection procedures have been implemented, a waste chemical may be disposed of by submitting a completed collection request form available from

Environmental Health and Safety, which will pick up the waste, place it in temporary storage, and then arrange for its disposal.
Waste disposal costs vary widely depending on the quantity and type of waste as well as the type of collection container used. It is highly recommended that Environmental Health and Safety be contacted during the project planning stage to discuss waste minimization and disposal options. The University policy on laboratory waste minimization can be found in Section 3.4.
Broken glass must be collected in a designated broken glass container; labels on empty reagent containers should be defaced prior to disposal in the regular trash.

7.1.6. Non-Laboratory Chemical Waste

Chemical wastes (such as old cleaning products, fuels, solvents, asbestos contaminated materials), and biohazardous wastes (such as blood-contaminated sharps) are regulated in Cihan University-Erbil. A waste determination must be made at the time of generation of each waste type to determine if and how it is regulated. Storage, labeling, handling, and disposal of these wastes are subject to the requirements discussed above. Environmental Health and Safety should be contacted for training and information related to the generation and disposal of these types of wastes.

7.2. Spill Prevention and Control

Highly toxic, flammable, or environmentally hazardous liquids should be stored in unbreakable containers, when possible and glass containers should be placed in secondary containment devices. When these liquids are dispensed, provisions must be made to prevent them from spilling into or entering a sink or floor drain. This can be accomplished by working within a containment device or area, covering the drain opening, etc. All drum quantities of hazardous liquids should be stored in a secondary containment device. An appropriate type and quantity of liquid absorbent material should always be available wherever hazardous liquids are used or stored. Users must be trained in spill cleanup procedures, as well as when and how to request outside assistance.
In the absence of a substance- or area-specific emergency spill response procedure, follow the procedures outlined in Section 2.3.

8. Electrical Safety

8.1. Portable Equipment, Tools, and Appliances

All portable devices must be UL-listed for the intended use. In addition, tools that are not double insulated and appliances with metal housings must be grounded. Electrical cords must be free from damage, unauthorized repairs, and deterioration. Portable tools or devices used in wet or damp locations or near a source of water must be protected by a ground fault circuit interrupting (GFCI) outlet or adapter.

8.2. Fixed and Hardwired Equipment

A local disconnect capable of being locked out must be provided. All persons performing maintenance and repairs must be qualified and authorized by the University to do so.

8.3. Electrical Welding Equipment

All electrical welding equipment must meet the requirements of Cihan University-Erbil General Industry Safety Standard for welding and cutting.

8.4. Extension Cords

The use of extension cords is restricted to portable equipment intended to be moved from place to place. Items that are capable of being moved, for example a desktop computer, but are part of a fixed workstation are not considered portable. Surge protection devices are not considered to be extension cords when used to protect sensitive electronics.
Extension cords may not be used as an alternative to fixed wiring or to extend the existing electrical supply capacity of a work area. Instead, request that Facilities install additional outlets.
Never combine extension cords end to end and always verify that an extension cord is rated for the maximum capacity of the load to be applied and for the environment in which it is to be used. Do not run an extension cord under carpeting or where it will be damaged or cause a tripping hazard.

8.5. Electrical Safety-Related Work Practices

Employees who face a risk of electrical shock that is not reduced to a safe level by the installation design must be trained in the safety-related work practices that pertain to their respective job assignments and the requirements. Job titles of employees typically requiring such training include but are not limited to: electrical and electronics engineers, electrical and electronics technicians, electricians, equipment operators, welders, painters, and their supervisors.
Unauthorized persons shall not tamper with electrical fuse boxes, alter existing wiring, or install electrical wiring. Facilities Management authorizes, in writing, those personnel specifically permitted to work on campus electrical circuits.

9. Equipment Safety

Departments purchasing new or used equipment are responsible for ensuring that all required and necessary safety guards and systems are in place and properly functioning before using the equipment.
Employees and students are responsible for replacing any guards that have been removed for maintenance or adjustments before operating the equipment and for reporting any missing guards to their supervisor so they can be replaced before the equipment is put back into operation.

9.1. Grounds Keeping and Heavy Equipment

Grounds keeping and heavy equipment including lawn tractors, end loaders, dump trucks, and road graders, must be operated and maintained according to the manufacturer's instructions. Operators must be trained according to the manufacturer's operating

instructions as well as any applicable equipment-specific MIOSHA standards. Applicable personal protective equipment such as hand, foot, eye, and hearing protection must be selected by the supervisor, with assistance from Environmental Health and Safety, and worn at all times by the equipment operators.

9.2. Forklifts and Powered Pallet Jacks

Forklifts and powered pallet jacks must be maintained according to the manufacturer's instructions. Forklift operators must be trained in the operation of the equipment under the direct supervision of a qualified trainer. The employee must receive safety training within 30 days of the start of operator training. Environmental Health and Safety provides forklift safety training by request.
Pallet jack operators must be trained in the safe operation of the equipment before operating unsupervised. Training shall be provided by a qualified supervisor or designated person.

9.3. Cranes

Cranes shall be operated, inspected, and maintained according to the manufacturer's instructions. Before operating a crane unsupervised, operators shall be trained in the safe operation by a qualified supervisor or designated person. No crane shall be installed or used without a capacity certification label attached and visible from the floor, and all cranes must be rated and certified by a qualified professional engineer.

9.4. Metalworking and Woodworking Machinery

Employees who work in metal or wood shops must be qualified by education and/or apprenticeship in the operation of the equipment and must also be trained. Operators should also be familiar with and follow the manufacturer's operating and maintenance instructions. Adequate space must be provided for aisles, layout, material handling, and machine setup and maintenance.

9.5. Welding and Cutting

Only employees who have been properly trained and authorized by their supervisor may perform welding and cutting operations using electrical or fuel-operated equipment. In addition, authorized employees must also be trained in the safe operation of the equipment. In addition, the supervisor shall select and provide personal protective equipment.
The principal hazards to welders are: fire, burns, electric shock, metal vapor poisoning, bruises, and explosions of compressed and/or flammable gases.
The welder's clothing should be nonflammable, have no pockets, cuffs, or folds, and must completely cover all skin areas. A long leather apron with a high bib is desirable for outer clothing. Gloves with long gauntlets prevent metal from burning the welder's wrists. Shoes should have tops high enough to extend up inside the trouser leg. Ears should be covered only when goggles are worn.
Appropriate eye protection must be worn at all times. All lecturers, staff, students, and visitors are required to wear eye protection in areas classified as potentially hazardous to the eye, including protection from welding flash.

Be sure the arc welder is insulated and transformers are grounded. Dry leather gloves and nonconductive flooring are standard.
In welding operations, metals with coatings of lead, zinc, cadmium and other toxic metals present fume hazards. Other noxious fumes, depending upon the base metal being welded and the welding rods used, can include the oxides of nitrogen and carbon, copper, manganese, selenium, silica, arsenic, titanium, and fluorine. Proper ventilation must be provided.

9.6. Department-Specific Equipment

Departments are responsible for establishing safe operating and emergency response procedures and training for students and employees who operate or work near hazardous equipment. Examples of hazardous equipment include high-energy magnets, robots, injection molding machines, power presses, pressure vessels, lasers, cryogenic gas storage, and delivery systems, etc.

9.7. Lockout of Hazardous Energy Sources

Employees authorized by the University to perform maintenance or repairs on machines and equipment in which the unexpected energization or startup could cause injury must be trained. All other employees who operate or work near such machines or equipment must be trained.
Each department responsible for the operation of machines or equipment that could cause injury due to unexpected energization or startup during maintenance or repairs is responsible for establishing a written lockout procedure for each machine. Either the written lockout procedure or directions to its location must be posted where it will be visible from the point of operation of the equipment.

10. Laboratory Safety

The doors to laboratories utilizing hazardous equipment, toxic or flammable chemicals-and the doors to hazardous materials storage rooms-must be posted with an emergency response sign listing the nature of the hazards and name(s) and phone number(s) (work and home) of the individuals who are responsible for and/or familiar with the hazards and secured against unauthorized entry when the laboratory is unattended.

10.1. Flammable Liquids in Laboratories and Chemical Storage Rooms

The storage and use of flammable liquids in laboratories shall comply with the applicable provisions of the National Fire Protection Association Standard.
Refrigerators used for the storage of flammable liquids must be designed for this purpose and labeled as such. Domestic refrigerators may not be used for flammable liquids storage and must bear a label prohibiting flammable storage. Existing domestic refrigerators modified by Facilities may continue to be used for flammable storage as long as they are properly labeled. Explosion-proof refrigerators (also referred to as intrinsically safe) are intended for use in locations where the atmosphere outside the refrigerator is, or is reasonably likely to be, explosive and are typically not required in University laboratory environments.

Most laboratory fires are caused by ignition of flammable liquid spills or vapors that have spread from open containers near ignition sources such as hot plates and burners. Experiments and demonstrations should be planned in advance to ensure that sufficient distance is maintained between ignition sources and exposed flammable liquids (some solvent vapors can spread 10 feet or more along a bench top or floor).

The purpose of a flammable liquid storage cabinet is to delay the ignition of stored flammable liquids during a laboratory fire. It is not intended to contain or remove harmful or foul-smelling vapors from poorly capped or contaminated containers. Venting of storage cabinets can reduce the level of fire protection and is discouraged except when the contents are so volatile and foul smelling that it is absolutely necessary. Venting must be accomplished according to the manufacturer's recommendations and in compliance with building fire safety codes and with the approval of Environmental Health and Safety and Facilities. The vent covers provided with the cabinet must be maintained in place at all times except when removed for the installation of a vent system.

Storage of flammable liquids in a laboratory shall be limited to that required for the operation of the laboratory. In addition, the following restrictions for laboratories and chemical storage rooms apply:

- Containers of Class IA liquids shall not exceed one pint capacity for glass containers, one gallon capacity for metal or approved plastic, or two gallons capacity for safety cans.
- Containers of Class IB liquids shall not exceed one quart capacity for glass containers, five gallons capacity for metal or approved plastic and safety cans.
- Containers of Class IC liquids shall not exceed one gallon capacity for glass containers, five gallons capacity for metal or approved plastic and safety cans.
- Containers of combustible liquids shall not exceed one gallon capacity for glass containers, five gallons capacity for metal or approved plastic containers and safety cans, and 60 gallons for metal drums.
- Not more than five gallons of Class I flammable liquids—or 10 gallons for Class I and combustible liquids combined—shall be stored outside of a UL-listed or FM-approved storage cabinet per 100 gross square feet of floor space.
- The maximum amount of flammable liquids stored inside and outside of approved storage cabinets may not exceed ten gallons of Class I flammable liquids —or 20 gallons for Class I and combustible liquids combined—per 100 gross square feet of space.

Definitions:

Approved Plastic—A plastic container approved for shipment of a particular flammable liquid.
Class IA flammable liquid—a liquid having a flash point below 73°F (22.8°C) and having a boiling point below 100°F (37.7°C).
Class IB flammable liquid—a liquid having a flash point below 73°F (22.8°C) and having a boiling point at or above 100°F (37.7°C).
Class IC flammable liquid—a liquid having a flash point at or above 73°F (22.8°C) and below 100°F (37.7°C).
Combustible liquid—a liquid having a flash point at or above 100°F.

10.2. Chemical Laboratories

10.2.1. Chemical Hygiene Plan

Chemical laboratories requiring a chemical hygiene plan and a chemical hygiene officer are those that use multiple chemical procedures or chemicals in a laboratory environment (i.e., where protective laboratory practices and equipment are available and in common use to minimize the potential for employee exposure to hazardous chemicals). Pilot plant operations that simulate production processes are exempt.
Departments with laboratories must appoint a chemical hygiene officer who will assist in the development and implementation of a written department-specific chemical hygiene plan. The chemical hygiene plan will contain procedures for procurement, storage, use, and disposal of laboratory chemicals as well as the use of emergency equipment, personal protective equipment, engineering controls, and administrative controls for student and employee protection against laboratory hazards. The chemical hygiene plan must also contain laboratory-specific standard operating procedures, SOPs, for each chemical procedure. The written laboratory-specific SOPs must include a list of chemicals in use, the required personal protective equipment to be used for each procedure, and the safe work practices for each procedure. Spill response and waste disposal procedures should also be addressed in the SOP.
The department chemical hygiene officer shall be qualified by training or experience to provide technical guidance in the development and implementation of the provisions of the chemical hygiene plan. This should include a knowledge of the regulatory requirements for laboratory work as well as chemical safety and related industrial hygiene practices; supervisory experience; knowledge of department-specific chemical operations, inventories, hazards, purchasing and disposal practices, and safety equipment; and good written and verbal communication skills.

10.2.2. Chemical Labels and Material Safety Data Sheets

Chemical reagent containers must be labeled in accordance with Section 6.4 of this safety manual. Laboratory preparations must be labeled with the chemical identity of the contents, the date, and the identity of the owner. Chemical formulas are not acceptable as part of the identity description except for those that would be recognized and understood by lecturers and staff outside the department. If the laboratory preparation is transferred to another location, the label must also include a primary hazard warning statement. A material safety data sheet or its equivalent may be required if the material is to be shipped off campus.
It is the responsibility of the person who receives an incoming chemical shipment to retain any material safety data sheets that are included. Each department may decide how and where material safety data sheets will be made available to students and employees as long as they are available whenever students or employees are on site.

10.2.3. Fume Hoods

Fume hoods are critical components of the total safety and health protection system provided to students and employees working with hazardous materials, and they serve to protect the rest of the building occupants as well. However, a fume hood is only effective if it is designed, installed, maintained, and used properly. Fume hood users share responsibility for ensuring that the hoods are properly maintained by notifying the laboratory supervisor or department head whenever a fume hood is not functioning properly. The user is also responsible for properly utilizing the hood. The following guidelines should be considered:

- Always work in a fume hood rather than on an open bench when using substances that have objectionable odors or emit toxic or flammable vapors.
- Verify proper air flow in the hood before starting work by checking the built-in flow meter or by holding a piece of paper towel near one of the air slots at the rear of the hood (learn to distinguish between the strength of the airflow caused by the blower and the flow caused by the “chimney effect” when the blower is not running). The sound of the blower motor is no assurance of hood operation because the drive belt may have failed.
- Remove everything from the hood that is not needed for the work to be performed.
- Avoid situations that could cause cross drafts in front of the hood, like open windows or doors, fans, pedestrian traffic, rapid movement of hands in or out of the hood, or rapid changes in sash position.
- Always work with the sash in the lowest possible position.
- Set up work at least six inches behind the plane of the sash.
- Adjust the hood baffles, if available, for the anticipated density of vapor emissions relative to that of the surrounding air. Emissions lighter than air, as a result of heating or low molecular weight, should correspond to shifting the baffle opening toward the top of the hood, and vapors heavier than air should be captured near the bottom.
- Use a support stand, if possible, to keep large containers and instruments a few inches above the work surface inside the hood to improve air flow around the setup.
- Avoid placement of cabinets or other objects in close proximity to the hood that might restrict the operator's ability to back away during an emergency or that cause turbulence in the airflow into the hood.
- Work with heated perchloric acid only in a properly functioning perchloric acid hood. Be sure you are familiar with the manufacturer's operating instructions.
- “Walk-in” hoods are not intended to be entered by the operator while in use; they are designed to permit the use of larger setups than a bench-top hood can accommodate. The same general principles of operation apply as for a bench-top hood.
- Pay attention to the most recent face velocity measurement posted on the hood. Do not work with highly toxic substances in a hood with a face velocity significantly less than 100 fpm.
- Use only intrinsically safe electrical instruments and connections in a hood when using heated or highly volatile flammable liquids and eliminate all other sources of ignition.
- The hood sash is not an explosion shield. If an explosion is the possible outcome of an instrument or operator failure, the experiment should be operated remotely or in a specially designed test cell or facility.

10.2.4. Chemical Purchases

Laboratory chemicals may not be delivered directly to an individual's office. All deliveries must be made to an area staffed during University operating hours by personnel who have been trained in accordance with the Cihan University-Erbil Hazard Communication Plan. The delivery area and process must also provide for adequate security to prevent unauthorized access to the chemicals.
It is the policy of Purchasing to not use procurement cards to purchase laboratory chemicals.

10.3. Radiation Producing Equipment and Materials
10.3.1 Nuclear Regulatory Commission Regulated Materials

Work involving equipment or materials regulated by the Nuclear Regulatory Commission (NRC) is overseen by the University Radiation Safety Committee and the Radiation Safety Officer (RSO) in the Environmental Health and Safety Department. Only employees specifically named in the University radioactive materials license may purchase these materials and each purchase must be approved by the RSO in advance. Lecturers and staff wishing to engage in research involving radioactive materials should contact the RSO for information and assistance in obtaining any necessary approvals.

10.3.2. Ionizing Radiation Producing Equipment and Radioactive Materials

Lecturers and staff intending to purchase equipment that produces ionizing radiation—for example, X-ray diffraction machines, scanning electron microscopes, gas chromatographs, etc.—must first contact the RSO for information about registration, operation, and training.

10.3.3. Lasers

Depending on the power output classification of the laser(s) in use, the department may need to designate a laser safety officer (LSO) to oversee the installation, use, and maintenance of equipment as well as the training of personnel.

10.4. Biological Laboratories

All activities involving the use of recombinant DNA/RNA must receive prior approval of the Institutional Biosafety Committee. Work involving infectious agents generally requiring Biosafety Level 2 or 3 practices must receive prior approval of the Biological Safety Committee. Activities requiring Biosafety Level 4 practices are forbidden at this time.
Activities involving the use of human body fluids, cell lines, and unfixed tissues require training and implementation of a written blood-borne infectious diseases exposure control plan.
Activities involving the use of nonhuman primate body fluids, cell lines, and unfixed tissues require training and documentation.
Activities that generate medical waste (sharps and potential or known human pathogens including zoonotic) require training and site registration with the Department of Health. Decontaminated biohazardous waste may not be placed in the regular trash without removal of all biohazard labels and markings. Over packing or covering a biohazard label is not acceptable.

10.5. Shipping Hazardous Materials

Shipments of hazardous materials—such as explosives, compressed gases, flammable solids and liquids, oxidizers, toxic and infectious materials, radioactive materials, corrosive substances, and environmental pollutants—are regulated by the Department of Transportation (DOT), regardless of quantity. Employees who offer such materials for shipment, as well as those responsible for receiving shipments, must be trained in accordance with DOT regulations.


SITE SAFETY
Construction work in progress parents are advised to warn children of the dangers of entering this site
DANGER Demolition work in progress
No admittance for unauthorised personnel
Use ear Protectors
This is a hard hat area
High visibility jackets must be worn
Protective footwear must be worn
WARNING Look out for overhead loads


Healthy Workplaces
Healthy Minds at Work
You have a healthy WORK-LIFE BALANCE
Your JOB DEMANDS are reasonable
You are SAFE at work
You feel VALUED AND RESPECTED
Your work is CHALLENGING
Your employer supports GROWTH AND DEVELOPMENT
Workplace support is key to maintaining positive mental health
CCOHS.ca

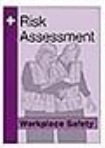

Understanding
Safety Signs
WHAT YOU NEED TO KNOW...
The Health and Safety (Safety Signs and Signals) Regulations 1996 implement the European Council directive on minimum requirements for the provision of safety signs at work.
Signs are required where, despite the implementation of all other relevant measures, a significant risk to the health and safety of employees and others remains.
Signs must be clear and legible, and should be used to identify the actions that are required.
PROHIBITION SIGNS
Prohibition signs tell you what you must not do. Signs are circular with a white background, red border and crossbar, and a black symbol in the centre. They must not be ignored.
NO NAKED FLAMES
MOBILE PHONES PROHIBITED
NO FOOD OR DRINK IN THIS AREA
DO NOT STEP IN THIS AREA
NO SMOKING
WARNING SIGNS
Warning signs tell you if there is a general or particular hazard.
Signs are triangular with a yellow background, black border and a black symbol in the centre.
GENERIC WARNING
BEWARE OF FORKLIFT TRUCKS
HIGH VOLTAGE
WARNING CORROSIVE SUBSTANCE
RADIOACTIVE
MANDATORY SIGNS
Mandatory signs tell you what you must do, particularly where you have to wear protective equipment.
Signs are circular with a blue background and white symbols. They must not be ignored.
EAR PROTECTION MUST BE WORN
WASH YOUR HANDS
HARD HAT AREA
SAFETY VESTS MUST BE WORN
REFER TO INSTRUCTION MANUAL
SAFE CONDITION SIGNS
Safe condition signs tell you where safe conditions are, such as emergency exits and first aid points.
Signs are rectangular with a green background and white symbols.
DEFIBRILLATOR
EYE WASH STATION
EMERGENCY EXIT WITH ESCAPE LADDER
EMERGENCY TELEPHONE
FIRST AID
FIRE SAFETY SIGNS
Fire safety signs are used to indicate the location of fire fighting equipment.
Signs are rectangular with a red background and white symbols.
FIRE EXTINGUISHER
FIRE HOSE REEL
FIRE EMERGENCY TELEPHONE
FIRE ALARM
FIRE FIGHTING EQUIPMENT
THE INFORMATION DISPLAYED ON THIS POSTER IS FOR GUIDANCE ONLY AND IS NO SUBSTITUTE FOR FORMAL TRAINING.

Health & Safety At Work Guide

Control Of Substances Hazardous To Health

The Control of Substances Hazardous to Health Regulations 2002 (COSHH) place a duty on employers to protect employees from substances used (within the workplace) that may be hazardous to their health. In general the regulations require that the following should occur:

- **Assessment of the health risks associated with the work activity that involves hazardous substance.**
- **Control measures to limit and control the risk.**
- **Maintenance of the relevant measures and associated equipment.**
- **Monitoring of the employees and the effectiveness of the employed measures.**



General Information

A copy of this organisation's Health & Safety policy can be found in the following location, or additionally, contact the person named below:

This guide has been designed to assist you in understanding why some of the illustrated elements and regulations exist in your workplace. By gaining a much clearer understanding, you will be able to provide your employer with accurate feedback as to how effective and practical each element is. Remember, good health and safety practice relies upon good team work.

As an employee you are entitled to work within an environment which does not put your health or safety at risk. The Health & Safety at Work etc Act 1974 defines this requirement, but additionally places responsibility on you, the employee, to take reasonable care of your own health & safety and co-operate with your employer in order that compliance to the Act is met. In addition,

The Management of Health & Safety at Work Regulations 1999 (Regulation 12) introduces new employee duties. They must use all machinery, equipment, dangerous substances, means of production, transport equipment and safety devices in accordance with any relevant training and instructions, and inform their employer or specified fellow employees of dangerous situations and shortcomings in the employer's health & safety arrangements.

First Aid At Work Regulations

The Health & Safety (First Aid) Regulations 1981 ensure employers assess the need for first aid provision within the workplace.

In general, this should provide the following:

- **Appointed persons and trained first aiders may be required to meet the level of risk identified within your workplace.**
- **First aid equipment the first aid assessment may also require the availability of eyewash facilities.**
- **Accident book, by law every business must record accidents to employees and visitors.**

Personal Protective Equipment (PPE)

The Personal Protective Equipment at Work Regulations 1992 place a duty on employers to provide suitable Personal Protective Equipment (PPE) when assessment has shown a requirement for Personal Protection as a last resort. By definition, PPE is equipment designed to be worn or used by a person within his/her workplace to provide protection against one or more risks. Included within this are any additions or accessories designed to eliminate the risk.

Suitable PPE means:

- **Correct and relevant for the identified risks and conditions.**
- **Meets the ergonomic & health requirements of the wearer.**
- **The item / apparatus should be capable of fitting the wearer sufficiently and correctly after adjustment.**
- **It prevents / controls the risk without increasing the risk - so far as is practicable.**
- **It should comply with the recognised conformity standards of the time.**

This does not apply to PPE purchased prior to the regulation harmonisation. All new items will bear the 'CE mark'.

Manual Handling

The Manual Handling Regulations 1992 are designed to reduce the risk of injury to the employee when performing manual handling tasks.

Manual handling includes:

- **Lifting**
- **Pushing or pulling**
- **Carrying**

If you do not follow your company's manual handling policy you are putting yourself at risk from the following injuries:

- **Torn Ligaments**
- **Tendon damage**
- **Muscular / nerve damage**
- **Fractures**
- **Contusions**
- **Cuts**
- **Hernias**

The 10 point safe lifting plan

As a reminder, please follow the steps below:

01. **Refer to your manual handling policy if unsure prior to lifting.**
02. **Ensure your footwear is suitable and adequate for the task.**
03. **Ensure a firm stable grip.**
04. **Know your limitations, don't be afraid to ask for help.**
05. **Keep your back straight and bend at the knees.**
06. **Tuck your chin in.**
07. **Keep your arms close and locked into your body.**
08. **Utilise your body weight where possible.**
09. **Assess the load. Include factors such as construction, moving parts, shape, weight, size, the load's current and intended environment and location.**
10. **When lifting in pairs (or more) always ensure that one person controls and co-ordinates the task.**

Safety Signs & Signals

The Health & Safety (Safety Signs & Signals) Regulations 1996 are designed to communicate Health and Safety Information. The regulations relate to all areas of communication for example illuminated signs and even acoustic signals (such as fire and evacuation alarms). The most traditional and common form of communication is a sign. Signs are displayed to provide employees with a wealth of information, including alerting them to a hazard. Examples of commonly used signs.

Mandatory

The mandatory sign is used to convey a message of compliance. It is used to tell you what to do. Many examples within the workplace relate to the use of PPE (Personal Protective Equipment) and feature items of PPE you should use in certain areas, or when carrying out specific tasks. White symbol in blue circle.

Safe condition

The Safe Condition sign is used to provide employees with information relating to safety provisions (such as First Aid Box location). In addition, the sign can also indicate safe routes of passage, e.g. escape routes / fire exits. Green box with white outline containing white symbol.

Prohibitive

The prohibition sign is used to tell you that you must not carry out a certain action or task. Common examples of such signs include: No Smoking, No Entry or Access. Red circle with a red diagonal cross through symbol.

Warning

The warning sign is used to inform employees that a hazard or risk is present. The sign should alert you to the potential of a hazard or risk therefore increasing your awareness. Yellow triangle with black border containing black symbol.

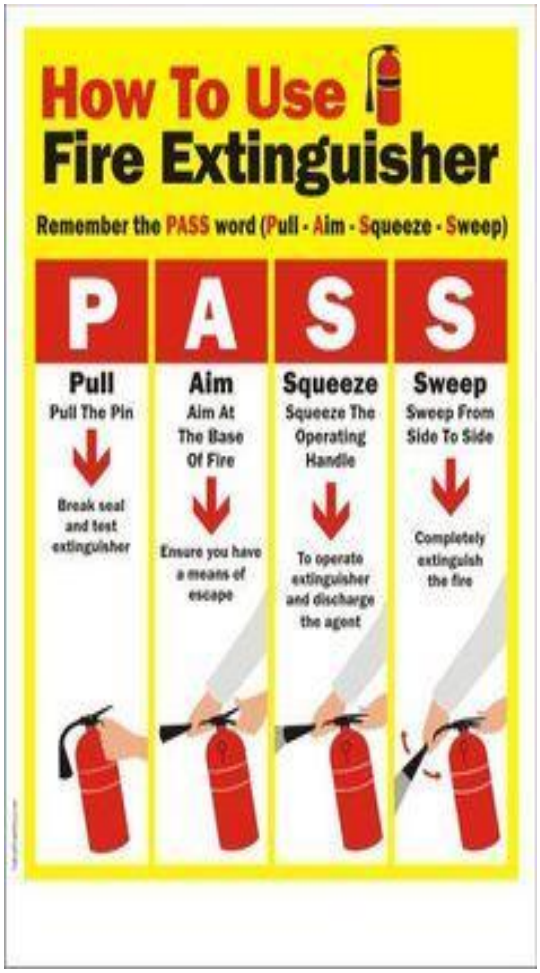
Fire fighting

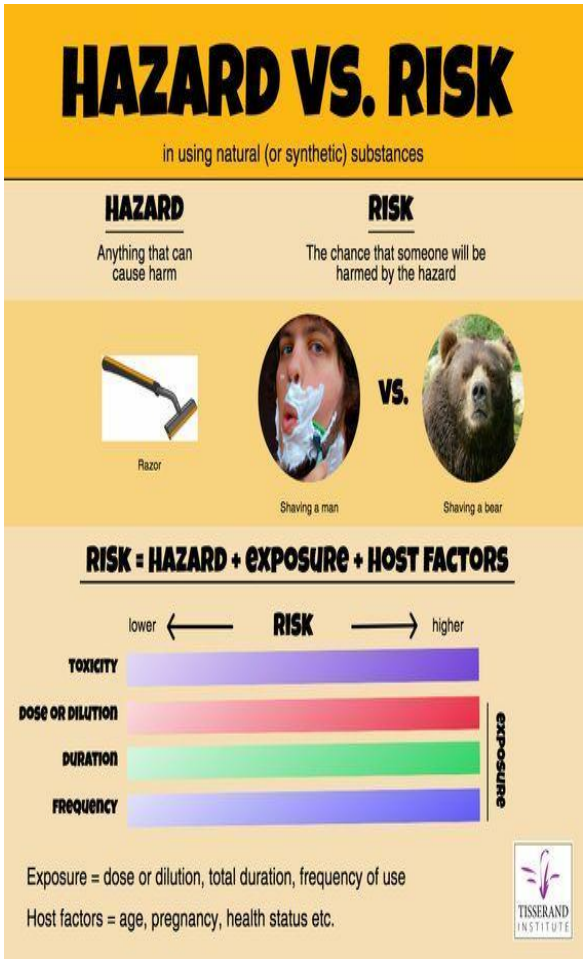
A white symbol enclosed in a red box indicates that this sign shows the location of fire equipment.

The information contained in the poster is for guidance only and should not be used as a substitute for recognised training.

AEG7 (REV 05/17)


Fire Safety
Precautionary Measures
FIRE WARDEN
Control Measures
Maintenance & Testing of Precautionary Measures
Action During a Fire
Fire alarm
Fire Fighting Equipment
Know Your Fire Extinguisher Colour Code
Water
Dry powder
Foam
Contacting the Emergency Services


How To Use
Fire Extinguisher
Remember the PASS word (Pull - Aim - Squeeze - Sweep)
P
A
S
S
Pull
Pull The Pin
Break seal and test extinguisher
Aim
Aim At The Base Of Fire
Ensure you have a means of escape
Squeeze
Squeeze The Operating Handle
To operate extinguisher and discharge the agent
Sweep
Sweep From Side To Side
Completely extinguish the fire

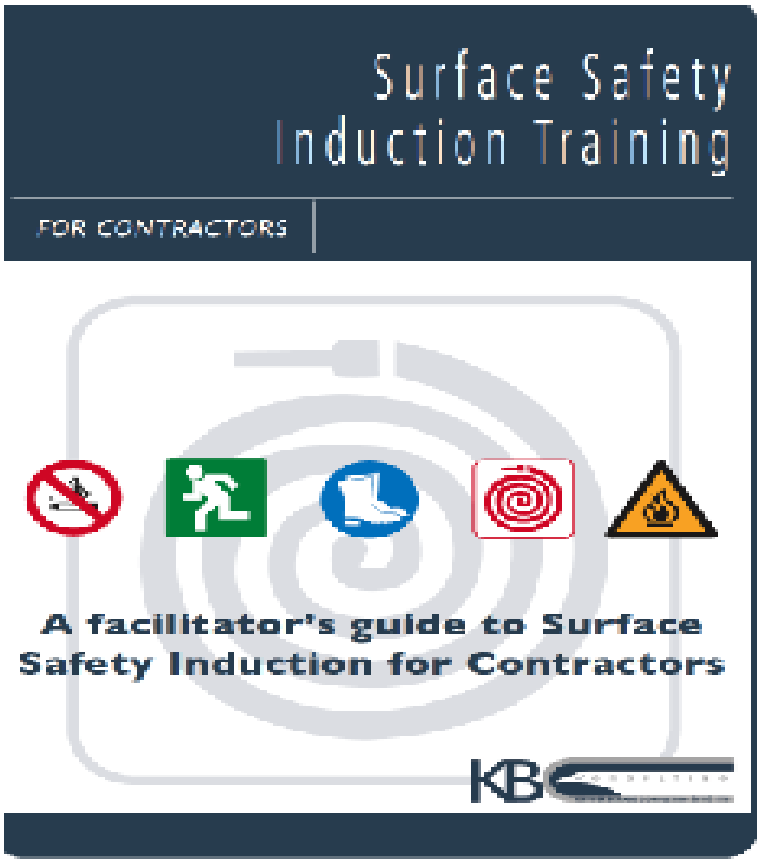

HAZARD VS. RISK
in using natural (or synthetic) substances
HAZARD
Anything that can cause harm
RISK
The chance that someone will be harmed by the hazard
Razor
VS.
Shaving a man
Shaving a bear
RISK = HAZARD + EXPOSURE + HOST FACTORS
lower
RISK
higher
TOXICITY
DOSE OR DILUTION
DURATION
FREQUENCY
EXPOSURE
Exposure = dose or dilution, total duration, frequency of use
Host factors = age, pregnancy, health status etc.
TISSERAND INSTITUTE


Safety Poster Guide
SAFESTART


SAFETY IS
LIKE A LOCK
BUT
YOU ARE
THE KEY


WORLD DAY
FOR SAFETY
AND
HEALTH AT WORK
28 April
shutterstock.com · 1950542050


SAFETY SLOGANS
SAFETY IS NO ACCIDENT
Stay Alert, Don't get Hurt
SPORTSFEELGOODSTORIES.COM


Surface Safety
Induction Training
FOR CONTRACTORS
A facilitator's guide to Surface Safety Induction for Contractors
KBC

5. Resources

1. https://www.ucc.ie/en/studentexperience/health-and-safety-for-student-activity/
2. https://www.tcd.ie/stem/undergraduate/health-safety.php
3. https://www.memphis.edu/ehs/resources/forms.php