Central Washington University

Environmental Health & Safety

(Reference Doc. # CWU.EH.S-APP-001, Revision 2)

Accident Prevention Plan

For

Academic, Administrative, and Facilities Units

Table of Content

1.0 Introduction

This Accident Prevention Plan (APP) applies to all Central Washington University (CWU) operations wherever they are performed. CWU considers effective Environmental Health & Safety (EH&S) management to be of high priority to its faculty, staff, students, employees, and visitors. CWU is committed to continuous improvement in performance in all areas campus wide, and no job/task is so important an employee/student must violate an EH&S requirement or take unnecessary risk in order to perform their job/task.

The University places a high priority on the safety and well-being of its students, faculty, staff, volunteers and visitors. The University establishes and maintains a healthy and safe environment for all sanctioned activities and complies with applicable laws and regulations regarding safety and health of students, faculty, staff, volunteers and visitors.

It is the responsibility of each student and employee to work safely and assure co-workers are also working safely. Faculty, staff and students are encouraged to report all unsafe acts and or conditions to their supervisor immediately and actively participate in identifying ways to improve activities affecting EH&S.

Department Chairs are responsible for the safety of their faculty staff and students. As a part of their daily duties they shall monitor the work place for unsafe conditions, watch students, faculty, staff and visitors for unsafe actions and take prompt action to report, eliminate or mitigate the hazard.

CWU maintains a system for identifying and correcting hazards, and planning for emergencies through such processes as but not limited to establishing safety committees, conducting safety and health orientation, safety meetings, hazard communication, use and care of PPE, emergency response, facility and site safety inspections, emergency evacuation drills, first aid and eye wash stations and providing initial and ongoing safety awareness training for all students, employees and visitors as well as enforcement of student conduct and disciplinary policy to insure that all university EH&S policies are followed.

OUR GOAL IS ZERO ACCIDENTS, INJURIES AND ILLNESSES.

1.1 Policy CWUP 2-40-120 Health and Safety for University Community

1.2 Purpose

This Environmental Health & Safety Accident Prevention Plan (EH&SAP) is designed to implement the safety requirements set forth in WAC 296-800-140 through WAC-800-14065 Safety & Health Core Rules, and Occupational Safety and Health Standards 29 Code of Federal Regulations (CFR) 1910 General Industry and 1926 construction.

- Pursue high standards of environmental, safety and health management.
- Work with clients to minimize negative environmental safety and health impacts.
- Maintain, review and report on environmental, safety and health indicators.
- Review accident and incident performance reports.
- Meet and or exceed environmental, safety and health objectives.
- Perform EH&S facility and site compliance inspections.
- Conduct annual review of conduct of operations.

1.3 Applicability

This EH&SAP applies to all CWU students, faculty, staff and visitors. Faculty, staff and students are responsible for their own safety, and shall monitor each other and implement safe behavior practices to help attain a (Zero) accident goal of this policy and university. CWU is committed to providing a safe and healthful working environment for all faculty, staff, students and visitors. This EH&S Accident Prevention Plan has been developed in recognition that- **Every Accident Is Preventable**.

It is faculty, staff and students responsibility to work safely at all times and help to identify process improvements. Department Chairs shall review and implement program requirements applicable to their work to the highest degree of safety possible.

1.4 Requirements

This plan may combine the Occupational Safety and Health Administration (OSHA) CFR regulations and the Washington Administration Code (WAC) (296-62 General Occupational Health Standards), (296-800 Safety and Health Core Rules) (296-800-140 Accident Prevention Program) as required for industry and administrative procedures and is intended to serve as a guide for implementing basic environmental health and safety requirements at CWU. This plan serves as a fundamental approach to environmental health and safety (EH&S) stewardship for department/project-specific activities. It is recommended that project-specific EH&S plans, procedures and or Standard Operating Procedures (SOPs), Job Hazard Analysis (JHAs) be implemented in addition to this basic APP plan, specifically if there are more rigorous or required project/task-specific EH&S requirements. Where rules and regulations of different agencies or authoritative texts such as but not limited to the National Fire Protection Association (NFPA), American National Safety Institute (ANSI), Underwriters Laboratory (UL), Factory Mutual (FM), and American Gas Association (AGA). If safety standards appear to be in conflict or overlap, the most stringent ruling shall apply.

Note: All revisions to the EH&S APP will be reviewed and approved by the EH&S department prior to implementation.

1.5 Management Framework and Duties

CWU'S Environmental Health and Safety Accident Prevention Plan (EH&SAPP) includes written standards and requirements to provide faculty, staff and students the general framework to facilitate university compliance within the requirements set forth in the Washington Industrial Safety and Health Act (WISHA), and the specific requirements of Washington Administrative Code (WAC) 296-800-140, Accident Prevention Program. Additional requirements such as but not limited to OSHA, NFPA, NEC may be applicable when working on client directed facilities. These requirements shall be addressed on a project-specific basis.

This Environmental Health and Safety Accident Prevention Plan apply to all CWU faculty, staff, students and visitors. In instances where CWU employees are working in client-supplied facilities, it may be necessary for those employees to work under the client's Safety and Health Program. In these instances, applicable portions of this program may still apply (e.g., record-keeping). In instances when it is necessary to develop site or project-specific health and safety plans, (HASP), those plans shall take precedence over the CWU EH&S program procedures. However, the general policy and requirements of this plan shall still be applicable.

1.5.1 Environmental Health and Safety (EH&S) Manager Responsibilities

- Ensure safety committee meetings are performed and documented.
- Insure sufficient employee time, supervisor support, and funds are budgeted for safety equipment, training and to carry out the CWU safety program.

- Evaluate supervisors, faculty and staff as needed or at a minimum annually to evaluate and or suggest recommendations, assess compliance and assure they are fulfilling their roles and responsibilities as described in this plan.
- Ensure that incidents are fully investigated and corrective action taken to prevent the hazardous conditions or behaviors from happening again.
- Insure that a record of injuries and illnesses are maintained and posted as described in this plan.
- Set a good example by following established EH&S rules and attending required training
- Report all unsafe practices or conditions to your supervisor immediately.

1.5.2 Department Chair/Supervisor Responsibilities

- The department chair shall assure implementation of the EH&SAP at project locations, and coordinate/conduct safety meetings with students, faculty, staff and or sub-contractors as needed.
- Provide for safety planning/meetings in the scheduling and coordination of the work or projects.
- Insure that each employee supervised is competent and receives appropriate training on the safe operation of equipment, and project requirements before starting work on that equipment or project.
- Insure that each employee receives required personal protective equipment (PPE) before starting work on a project requiring PPE.
- Perform daily walk through of the work area. Promptly report any hazards found to the EH&S department/supervisor.
- Observe working conditions and behaviors of employees. Promptly identify and or correct any unsafe conditions. Provide training and take corrective action as necessary, and document evaluations.
- Set a good example for students, faculty and staff by following safety rules and attending required training.
- Investigate all incidents in your area and report your findings to the EH&S department.
- Identify changes to work practices or equipment that could improve employee safety and report findings to the EH&S department.
- Provide and maintain safety services, tools, machinery, equipment, and personnel protective equipment (PPE) as required.

1.5.3 Faculty, Staff and /Student Employee Responsibilities

- Comply with all state and federal safety and training requirements described in this plan.
- Report unsafe conditions or actions to your Department Chair/Supervisor or EH&S department promptly.
- Report all injuries, accidents, and recognized safety hazards to your supervisor promptly regardless of how serious. All employees have “Stop Work Authority” if they feel it is warranted.
- Assure PPE in good working condition and worn as required.
- Do not remove or defeat any safety device or safeguard provided for employee protection.
- Attend safety meetings as required.

1.5.4 Environmental Health and Safety (EH&S) Representative Responsibilities

- The Environmental Health & Safety Representative will provide consultation, advice, and recommendations on EH&S matters.
- Prepare and retain all required reporting.

- Assist Department chairs/supervisors, faculty, staff and students in defining hazardous operations and developing safe work practices. i.e. SOP's JHA's etc.
- Consult on safety training plans and programs, conduct training courses, and make information and other resources on EH&S available.
- Review the EH&S Accident Prevention Plan annually and revise as needed.
- Assess projects involving hazardous work not covered in the EH&S APP and other CWU locations to ensure compliance with existing CWU policy and additional EH&S guidelines/requirements
- Conduct studies or evaluations as needed to develop or improve conduct of operations techniques and procedures for EH&S compliance.
- Conduct and review accident investigations and develop corrective actions as needed..
- Report all accidents or incidents on the CWU online Accident Reporting Form, or to the EH&S department, your department chair or supervisor.

1.6 Employer Responsibilities - WAC-296-800-110

CWU is committed to aggressively identifying hazardous conditions and practices, which could result in injury or illness to student's faculty, staff or visitors. CWU shall take prompt action to eliminate/mitigate any hazards identified. In addition to reviewing injury records and investigating incidents for their causes, department chairs, supervisors and the safety representative shall regularly conduct workplace inspections for potential hazards as described in the following subsections.

1.7 Safety Suggestions

Faculty staff and students are encouraged to provide safety suggestions to CWU's EH&S department. Suggestions will be evaluated by risk or hazard and addressed accordingly by the EH&S department. Additional comments or suggestions shall be addressed through the EH&S Safety Council process, CWUP 2-40-140 Health and Safety Policy and results communicated to the originating faculty, staff and or student (s) as to the final determination or merit.

1.8 Posting Requirements - WAC-296-800-200

Required safety posting and notices such as but not limited to the OSHA Annual Summary Log of Occupational Injuries and Illness (Form 300, 301 and 300A), WISHA Poster informing employees of their job safety and health protection rights, as well as notifications from the Department of Labor and Industries may be required within the workplace, such as but not limited to (Job Safety and Health Protection) (Notice to Employees if a job injury occurs) and (Your rights as a non-agricultural worker). All information is located on the EH&S bulletin board located adjacent to the EH&S Managers office as well as on the various EH&S bulletin boards throughout campus.

1.9 Safety Committee - WAC-296-800-130

CWU's safety committee helps student's employees and management work together to identify unsafe conditions/issues and develop solutions, review incident reports and evaluate the effectiveness of CWU's EH&S program.

The committee is made up of an elected chairperson, management-designated representative (s) and employee-elected representative each from different departments. The number of employee-elected members must equal or exceed the number of employer-selected representatives. The term of employee-elected members shall not exceed 1 year. There is no limit to the number of terms a representative can serve. If there is an employee-

elected member vacancy, a new member must be elected prior to the next scheduled meeting.

A chairperson shall be selected by majority vote of the committee members each year. If there is a vacancy, the same method shall be used to select a replacement.

Scheduled meeting times are once each month and/or as staff attendance allows, however meetings shall be held at least once each month,. This may be changed by vote of the council.
Topics to be covered area as follows:

- Review safety and health inspection reports to help correct safety hazards.
- Evaluate the accident investigations and determine if the cause (s) have been identified and or corrected.
- Document attendance and topics discussed.

A committee member shall be designated each month to keep minutes on a meeting minutes form.

- A copy shall be e-mailed to all attending members after each meeting. Record meeting minutes and preserve them for a minimum of 1 year.
- Make available for review by EH&S staff and or Department of Labor and Industries representative.
- After being posted for one month, the minutes will be filed by the EH&S Representative for one year.
- The minutes form contains the basic monthly meeting agenda.

In addition to the committee responsibilities explained above, duties of safety committee members include communicating with the students and employees, they represent on safety issues and encouraging safe work practices among students and co-workers.

1.10 Accident Reporting & Investigation - WAC-296-800-320

1.10.1 Record Keeping and Review - WAC-296-27-01107

Faculty, staff and students are required to report all injuries or work related illness to their immediate supervisor or the EH&S department regardless of how serious. The affected party shall enter minor injuries (Non Recordable) such as cuts and scrapes to the CWU Online Incident/Accident Report & Investigation form (Appendix A).The employee/student must use an “Incident/Accident &Investigation form and or Accident report. All forms can be obtained through the EH&S department or online at MY CWU.com EH&S Web Link- Accident Reporting

The supervisor and or the EH&S representative will:

- Investigate a serious injury or illness using procedures in the Section 4.2, Incident Investigation, below.
- Complete an "Incident Investigation Report,” found in Appendix A.
- Give the student/employee’s statement and the “Incident Investigation Report” to the EH&S Manager. The Environmental Health and Safety Representative will:
- Determine from the Employee’s Report, Incident Investigation Report, and any L&I claim form associated with the incident, whether it must be recorded on the OSHA Injury and Illness Log (Form 300) and Summary (Form 300A) according to the instructions for that form.

In the event that injury recordkeeping utilizing these forms identified above becomes required. The Human Resource Representative shall:

- Enter a recordable incident within six days after the university becomes aware of it.
- If the injury is not recorded on the OSHA log, add it to a separate incident report log, which is used to record non-OSHA recordable injuries and near misses.
- Each month before the scheduled safety meeting, make any new injury reports and investigations available to employees for review, along with an updated OSHA and incident report log.
- The EH&S Representative will post a signed copy of the OSHA log summary for the previous year on the EH&S bulletin board each February1 until April 30. The log will be kept on file for at least 5 years. Any employee can view an OSHA log upon request at any time during the year.

1.10.2 Accident Investigation Procedure - WAC-296-800-320

If an employee dies while working or is not expected to survive; or when two or more employees are admitted to a hospital as a result of a work-related incident, the EH&S Representative will contact the Department of Labor and Industries within 8 hours after becoming aware of the incident. During weekends and evenings, the toll -free notification number is: 1-800-423-7233.

The EH&S Representative must talk with a representative of the department. Fax and answering machine notifications are not acceptable. The EH&S Representative must report:

- The employer name.
- Location and time of the incident.
- Number of employees involved.
- Extent of injuries or illness.
- A brief description of what happened.
- The name and phone number of a contact person.

DO NOT DISTURB the scene except to aid in rescue or make the scene safe.

Whenever there is an incident that results in death or serious injuries that have immediate symptoms, a preliminary investigation will be conducted by the immediate supervisor of the injured person (s), a person designated by the department chair, an employee representative of the safety committee, and any other person (s) whose expertise would help the investigation.

Use Table 1, at the end of this section to guide the investigation and reporting. The investigation team will take written statements from witnesses, photograph the incident scene and equipment involved. The team will also document as soon as possible after the incident, the condition of equipment and any anything else in the work area that may be relevant. The team will make a written “Incident Investigation Report” of its findings. The report will include a sequence of events leading up to the incident, conclusions about the incident and any recommendations to prevent a similar incident in the future. The report will be reviewed by the safety committee at its next regularly scheduled meeting.

When a supervisor becomes aware of an employee injury where the injury was minor (not requiring any physician care or lost time away from normal work duties) to warrant a team investigation as described above, the supervisor will write an "Incident Investigation Report" to accompany the "Employee's Injury/Illness Report" and forward them to the EH&S Representative.

Whenever there is an incident that did not, but could have resulted in serious injury to an employee (a near-miss), the incident will be investigated by the supervisor or a team depending on the seriousness of the injury that would have occurred. The "Incident Investigation Report" will be used to investigate the near-miss. The form will be clearly marked to indicate that it was a near miss and that no actual injury occurred. The report will be forwarded to Human Resources to record on the incident log.

Table 1. Accident/Incident Table

Action you must take:	In case of death or probable death	All accidents involving inpatient hospitalization 24hrs.	In case of serious injury or illness	Near miss (accident almost happened) or non-serious injury or illness/Non Hospitalization
Report the accident to L&I within 8 hrs and include your phone number.	**Required**	**Required**	**Not Required**	**Not Required**
Complete and document an investigation.	**Required**	**Required**	**Required**	**Not Required**

1.10.3 Annual Facility Inspection

Once a year, the EH&S Manager and/or EH&S Representative along with a member of the CWU faculty and or staff shall conduct inspections of CWU's offices and facilities. The team shall identify and document any potential hazards. The results of this inspection will be used to correct, control, or eliminate work area hazards, and assist in identifying the effectiveness of CWU's Environmental Health and Safety Accident Prevention Plan.

1.10.4 Site Safety Meetings and Job Hazard Analysis (JHA)

Department safety meetings shall be conducted at least each month to promote safety awareness and overall job safety through CWU's Chairs, faculty, staff and or students and subcontractors as needed. All internal CWU safety meeting topics and attendees shall be recorded on a internal roster form and all records retained within the department for review. Prior to the start of all identified activities, a pre-job safety meeting shall be performed. The discussion should include activities planned, who will be performing them, what safety precautions are required and that each task/process assigned is understood. Discussions of the work scope may include but not limited to proper PPE selection, engineering controls, safe operation of equipment, and other project specific information.

A Job Hazard Analyses (JHA) shall be written, reviewed and signed by the project supervisor/lead and support staff for that project prior to commencement of work. The JHA shall identify project specific hazards, PPE and or additional processes needed to protect workers and safely conduct project activities. The JHA shall then be reviewed by the EH&S Manager and or EH&S representative for final approval. A JHA form can be obtained from the EH&S department or accessed in CWU (S) Drive controlled documents file.

1.10.5 Project - Specific Health and Safety Plans (HASP) Job Hazard Analysis (JHA) SOP's

Because CWU engages in a diverse range of activities, it is not practical to address all possible project/task specific EH&S activities in this document. Each department supervisor shall use this plan as the basic foundation

for project-specific work, but also address any additional activities where project-specific documentation/training is needed and or required, using CWU Policies, Procedures, SOP's, JHAs and Health & Safety Plans (HASP) or sub-sections to test plans or procedures where project-specific details are to be provided.

1.11 EH&S Expectations:

To maximize performance improvement and reduce risks. EH&S measures must focus on conformance and compliance to the EH&S Accident Prevention Plan. The points below are general safety expectations to be followed at all CWU facilities/projects.

- Faculty, staff and students shall fully support the EH&S program and policies of the University.
- At least one member of the CWU department team on campus/facility will be appointed the designated safety representative for CWU faculty, staff or student personnel. This person shall be responsible for monitoring and reporting all safety issues and or incident/accidents.
- The CWU department supervisor will meet with faculty, staff and or students before work commences. At this time, a pre-job safety meeting shall be held and will inform CWU personnel who their competent person/safety representative is on the project.
- EH&S will be formally discussed at all daily pre-job meetings with the project team. EH&S topics and attendees must be documented and maintained in a department safety file/log.
- The designated department supervisor for CWU shall conduct a formal safety walk-though of the area to identify potentially hazardous conditions and or review work practices prior to commencement of work.
- All CWU faculty, staff and students should be alert for potential safety hazards and improper work practice during their regular duties throughout the department/area. This should be noted in the daily department log and communicated immediately to your supervisor for correction.
- All sub-contractors on a CWU project are required to hold their own safety meetings with their personnel and or attend CWU's safety meeting if applicable. The topic discussed and attendees at these meetings shall be documented and a copy submitted to the CWU supervisor.
- All accidents/incidents within the department will be promptly reported to your supervisor. The supervisor will complete the appropriate accident reports and have a copy maintained in the department file.
- The supervisor shall post and discuss emergency evacuation, fire and medical information in the department or facility.
- CWU faculty, staff and or students shall inform the EH&S department of any scheduled or unscheduled site visitations by state inspectors.
- Supervisor's shall provide and maintain SDS logs on all hazardous materials for personnel for review and training purposes.

1.12 Hazard Communication –WAC-296-800-901

1.12.1 Global Harmonized System (GHS)

CWU's Hazard Communication Program is committed to the education and prevention of exposures to hazardous chemicals and or materials that could result in injury and or illness, to comply with all applicable state and federal requirements, assure all affected personnel are informed of potential dangers of hazardous chemicals used by CWU. As a minimum the following information shall be communicated prior to working with any hazardous chemicals and or materials.

1.12.2 Multi-Employer Workplaces WAC-296-828 Chemicals in Laboratories

This Hazard Communication Program applies to all CWU faculty, staff and students. However, in instances where CWU employees are working in client-supplied facilities, it may be necessary for those employees to work under the client's EH&S program. In these instances, applicable portions of this program may still apply. The hazard communication programs of our clients may differ from CWU's and it is the responsibility of CWU employees to

follow the applicable program.

Refer to M/SDS Log for hazardous chemicals and or materials used or stored on site. The M/SDS contains information about the chemical such as flammability, reactivity, health hazard and instability. Employers, personnel and their designated representatives may review the M/SDS log and Hazard Communication Program upon request to the department manager/supervisor.

1.12.3 Container Labeling

The EH&S representative will be responsible for reviewing, and updating container labeling procedures. Containers of hazardous chemicals and or materials may be identified by the presence of warning labels/symbols or tags affixed to incoming containers/secondary containers (GHS) symbols or by receipt of the M/SDS describing the hazards associated with the product. When CWU receives shipments of such products the following labeling system shall be implemented:

- Inspect each incoming product and ensure that each is labeled or tagged as to its contents. The container labels provided by the chemical manufacturer, distributor, or importer must be legible, clearly identify the chemical (s), and list the necessary hazard warnings for the product. The labels and any other forms of warning will not be removed or marked. These hazard warnings and any instructions for use must be followed during storage and use of the product
- Do not deface or remove labels from containers. Labels that are missing, illegible, defaced and or not in English shall be replaced. Prepare a label or tag with information required if needed (see example below) and affix to the container. Always refer to the M/SDS for additional labeling information.
- Labels are not required on portable containers into which hazardous chemicals are transferred from labeled containers and which are intended only for immediate use by the person (s) who perform the transfer.
- Hazardous chemicals dispensed into secondary containers, and left in those containers for longer than one work shift must be labeled with a Global Harmonized System (GHS) or equivalent label.
- Hazardous chemicals dispensed into secondary containers, and which will leave the immediate work area must be labeled with a GHS or equivalent label. Any instructions for use must be followed during storage a Do not deface or remove labels from containers. Labels that are missing, illegible, defaced and or not in English shall be replaced. Prepare a label or tag with information required if needed (see example below) and affix to the container. Always refer to the M/SDS for additional labeling information.
- Labels are not required on portable containers into which hazardous chemicals are transferred from labeled containers and which are intended only for immediate use by the person (s) who perform the transfer.
- Hazardous chemicals dispensed into secondary containers, and left in those containers for longer than one work shift must be labeled with a Global Harmonized System (GHS) or equivalent label.
- Hazardous chemicals dispensed into secondary containers, and which will leave the immediate work area must be labeled with a GHS or equivalent label.

1.12.4 Inventory of Hazardous Chemicals and M/SDSs

CWU and its departments maintain an M/SDS Log as well as an inventory list of all hazardous chemicals and or materials used and or stored at CWU. The chemical inventory lists and M/SDS log is located in the Facilities Management Department as well as with each required department of facility. Prior to purchasing any chemical or product that may be potentially hazardous or harmful, all M/SDS's should be reviewed. When purchasing these types of products ONLY purchase what you need to do the job, and evaluate other products that may work as well but may be less hazardous to the environment and workers, thus eliminating storage, disposal and or PPE concerns.

CWU is committed to prevent exposures to hazardous chemicals and or materials that could result in injury and or illness. Comply with all applicable state health and safety regulations, and assure all affected employees are informed and or protected from the hazards associated with those chemicals and or products. The following information usually can be found on most M/SDS's in section 11 Toxicological Information and should be reviewed prior to working with any hazardous chemical and or product. If you experience any of these symptoms listed below, leave the area and get to fresh air immediately. Contact your supervisor and or the EH&S Department as soon as possible. Note: If symptoms persist or worsen call 911 immediately.

Table 1- Symptoms

Burning	Foaming at the mouth	Sensations of the extremities
Blisters	Hallucinations	Shortness of breath
Chills and temperature variations	Headache	Skin Sensations
Convulsions	Hot or cold	Skin conditions
Coughing	Itching Burns	Stinging
Diarrhea	Lack of coordination	Stomach Cramps
Difficulty in swallowing	Light-headed	Swelling
Difficulty in breathing	Loss of consciousness	Slurred speech
Dizziness	Muscle cramps	Tearing of the eyes
Dryness of the skin	Nausea	Tightness of the chest
Double vision	Numbness	Tremors
Excessive perspiration	Paralysis	Unusual color
Extreme dryness of mouth	Pounding of the heart	Ulcerations
Extreme salivation	Rashes	Vomiting
Eye irritation	Ringing in the ears	Variation of pulse rate

Table 2 – Hazardous Chemicals/ Air Borne Contaminants

Common Hazardous Chemicals	Common Health Hazard	Product Effect of Types of Exposure
Asbestos Fibers	Carcinogen; Cancer- causing	Insulation
Acids. Cleaners and Solvents	Corrosive	Irreversible destruction to living tissue
Carbon Monoxide	Highly Toxic	Lethal from minimum exposure with internal combustion Engines carbon monoxide exhaust.
Acetic Acid, Silicone Sealants	Irritant	Inflammation of living tissues
Acetone Cleaners and Solvent	Sensitizer	Allergic reaction
Mineral Spirits, Paint Thinner	Toxic	Lethal with prolonged exposure

Table 3 - Toxic Agents

Agents	Signs and Symptoms	Associated Chemicals
Hepatoxins – Chemicals that produce liver damage	Jaundice, liver enlargements	Carbon Tetrachloride, Nitro-samines
Nephrotoxins – Chemicals that produce Edema	--	Halogenated Hydrocarbons, Uranium
Neurotoxins – Chemicals that produce primary toxic effects on the nervous system	Narcosis, behavioral changes, decrease in motor functions	Mercury, Carbon Disulfide
Agents that Act on the Blood – Decreased hemoglobin function, or hematopoietic system depriving the body tissue of oxygen	Cyanosis, loss of consciousness	Carbon Monoxide, Cyanides

1.12.5 Exemptions

The following substances are exempted from the requirements covered in this section:

- Retail products used in offices in the same manner and frequency used by consumers, can be termed “consumer products”, and include things such as: correction fluid, glass cleaner and dishwashing liquid.
- Manufactured items that remain intact are exempt from this rule.

Note: Manufactured items that are fluids or in the form of particles **are not exempt** from this rule.

1.12.6 Material/Safety Data Sheets (M/SDS) WAC-296-839-300

- The EH&S representative shall establish and monitor CWU’s M/SDS program. The department procuring any chemical should obtain the EH&S representative approval prior to procurement, and assure SDS’s are obtained for each product. A copy of the SDS shall be delivered to the EH&S representative for review, and may include an assessment of any additional or significant safety and health information and should be passed on to affected employees.
- A copy of M/SDSs for all hazardous chemicals and or materials will be kept at the project/department site, as well as in the EH&S Department. M/SDSs shall be made available to all employees during each work shift. If an M/SDS is not available or a new chemical does not have an SDS, immediately contact the supplier and request a copy prior to use of the product and contact the EH&S representative.

1.12.7 Employee Information and Training

The EH&S representative is responsible for the employee hazard communication training program. Before existing or new employees begin any work activity with the potential for exposure to hazardous chemicals and or materials, they will attend a health and safety orientation that includes information and training on the following:

- An overview of the requirements contained in the Hazard Communication Program and Globally Harmonized System of Classification and Labelling of Chemicals (GHS).
- Hazardous chemicals present at his or her work places.
- Physical and health risks of the hazardous chemical.
- The symptoms of overexposure.
- How to determine the presence or release of hazardous chemicals in his or her work area.
- How to reduce or prevent exposure to hazardous chemicals through use of control procedures, work practices, and personal protective equipment.
- Steps the employer has taken to reduce or prevent exposure to hazardous chemicals.
- Procedures to follow if employees are overexposed to hazardous chemicals.
- How to read labels and review M/SDSs to obtain hazard information.
- Location of the M/SDS file and written hazard communication program.
- An overview of the requirements contained in the Hazard Communication Program.
- Before introducing a new chemical hazard into any project, each employee in that section will be given information and training as outlined above for the new chemical.

1.12.8 Hazardous Non-Routine Tasks

Periodically, faculty, staff and students are required to perform hazardous non-routine tasks. (e.g., fieldwork on hazardous waste sites). Non-routine tasks are performed on a project-specific basis, and hazard control and mitigation will be addressed in project specific JHAs prior to commencing work. Prior to starting work on such projects, each affected employee/student will be given information by the project manager about hazardous chemicals he or she may encounter during these activities.

1.12.9 Multi-Employer Work Sites

It is the responsibility of the department supervisor/lead to provide employers of any other employees at the work site with the following information:

- Copies of M/SDSs (or make them available at a central location and or in the site specific Environmental Health and Safety Program Plan) for any hazardous chemicals that the other employer (s)' employee may be exposed to while working.
- Inform other employers of any precautionary measures that need to be taken to protect employees during normal operating conditions or in foreseeable emergencies.
- Provide other employers with an explanation of the labeling system that is used at the work site
- Department supervisor shall identify and verify M/SDSs for the chemicals the sub-contractor is bringing into the work place and or the job site.

1.12.9 List of Hazardous Chemicals

A list of all hazardous chemicals used at CWU along with related M/SDS's is located in the CWU facilities department. The chemical inventory list shall be revised on an as needed basis, but at least annually if project work includes changes that significantly affect the chemical and or hazards associated with use of the product.

1.13 Hazard Prevention and Control WAC- 296-800-110

1.13.1 Safety meetings and Job Hazard Analysis (JHA)

Safety meetings shall be conducted at least monthly to promote safety awareness and overall job safety throughout CWU and its support facilities. All CWU safety meeting topics and attendees shall be recorded and retained for review by the department supervisor and or EH&S department**.** The discussion should include activities planned and who will be performing them, and that each task or duty assigned is understood Discussions of the work scope may include but not limited to proper PPE selection, engineering controls, safe operation of tools and equipment as well as other project specific information and or duties.

1.13.2 General Safety Rules

- Never do anything that you feel maybe unsafe in order to get the job done. If a job is unsafe, stop work and report it to your supervisor/instructor etc. and or the EH&S department.
- All equipment will be maintained in good working condition.
- Only operate equipment and or tools you are authorized or trained to use.
- Equipment should be inspected regularly for disrepair. If equipment is faulty, it should be removed from service immediately and or until repairs can be made or new equipment purchased.
- All equipment shall be operated and maintained in accordance with manufacturer recommendations, project and or quality control /equipment maintenance requirements.
- Do not remove or disable any safety device. Keep guards in place at all times when operating machinery.
- Never operate a piece of equipment you are unfamiliar with.
- Use your PPE whenever it is needed and or required.
- Obey all warning signs.
- Working under the influence of alcohol or illegal drugs is prohibited.
- Do not bring firearms or explosives onto CWU property.
- Smoking is only permitted outside the building 25 feet away from any entry or ventilation intake (RCW-70-160).
- Horseplay, running and fighting are prohibited.
- Clean up spills immediately.
- Return all tools and supplies to their designated areas.
- Do not allow materials to accumulate where they will become a hazard. Good housekeeping helps prevent injuries.
- Do not lift on slippery surfaces.
- Test the load before doing the lift.
- Use a mechanical device such as a forklift, hoist, and hand truck or elevator whenever possible.
- Get help if the load is too heavy or awkward to lift safely or correctly alone.

1.13.3 Electrical WAC -296-800-280

- Minimize the use of extension cords.
- Ensure cords meet Underwriters Laboratories (UL) approval or the electrical load.
- Keep cords out of walkways and doorways. If they have to cross a walkway, cover them with proper protection, and store all cords in the appropriate manner.
- Do not overload electrical outlets.
- Unplug and remove from service any office machine that smokes, sparks, or delivers an electrical shock until repairs can be made.

- Turn power switches off and unplug electrical cords before cleaning or servicing any electrical equipment, such as copiers, faxes, and computers.
- Visually inspect all electrical equipment before use.
- Do not use any appliance or extension cord that exhibits signs of wear, such as frayed insulation or exposed wiring, and or missing ground plug.
- Never modify a plug by bending or altering the prongs.
- Never use any receptacle that moves when a plug is inserted. Loose receptacles can cause short circuits.
- All electrical work installation and wire capacities, both temporary and permanent, shall be in accordance with the National Electrical Code (NEC).
- All electrical equipment whether portable or fixed shall be grounded.
- Temporary lights shall be equipped with guards to prevent accidental breakage and or contact with the bulb.
- All switches, circuit breakers, receptacles, and fuse boxes that may be exposed to water shall be protected so that water does not enter

1.13.4 Ladders - Falls - WAC-296-876

- When working at greater than 10'specialized training will be required. Do not proceed without the approval of the Environmental Health &Safety Representative and or Project Manager/Supervisor.
- Before you use a ladder check it for defects such as loose joints, grease on steps, or missing rubber feet.
- Do not paint a ladder! You may hide a defect.
- Do not use a ladder as a brace, workbench or for any other purpose than climbing.
- Do not carry objects up or down a ladder if it will prevent you from using both hands to climb.
- Always face the ladder when climbing up or down.
- If you must place a ladder at a doorway, barricade the door to prevent its use and post a sign.
- Only one person is allowed on a ladder at a time.
- Always keep the ladder secured/tied off when possible and both feet on the ladder rungs except while climbing.
- Do not step sideways from an unsecured ladder onto another object.
- When using a ladder to access a roof or platform, the ladder must extend at least 3 ft above the landing and be secured at the top and bottom.
- Do not lean a ladder against a wall and use it as a single ladder.
- Always unfold the ladder fully and lock the spreaders.
- Do not stand on the top rung of a ladder.

1.13.5 Hand and Portable Power Tools

- All personnel shall be familiar in the safe operation of power tools.
- Any tool not in safe working order shall not be used and removed from service.
- Power cords shall be inspected and kept in good repair.
- Wooden handles shall be kept free of splinters and cracks and be kept tight in the tool.
- Taping of handles and removing safety guards is prohibited.

- All compressed air hoses exceeding 1/2 inch inside diameter, shall have a safety strap device at the source of supply or branch line.
- Power actuated tools shall be kept in their respective cases and or storage areas when not use.
- Tools shall be tested before each use to ensure that safety devices are in proper working condition.
- Keep all tools free of unwanted grease and oils.
- All tools shall be stored safely and maintained according to manufacturer's specifications.

1.13.6 Guarding – WAC-296-800-260

- The project manager/supervisor shall plan for the prompt installation and maintenance of guarding as required.
- The project manager/supervisor shall assign responsibilities for the installation and maintenance of guarding to the appropriate parties and enforce their compliance.
- The project manager/supervisor shall provide for daily inspection of all areas where guarding is in place or may be required. He/she shall place particular emphasis on areas of high activity or rapidly changing conditions where the need for installation and maintenance may be most critical, and issue instructions for prompt corrections to guarding deficiencies found.
- The project manage/supervisor shall see that the design and installation of guarding is readily adaptable to the type of work to be performed in the guarded areas.
- The guarding shall facilitate removal and replacement where required, be readily maintainable, and provide maximum protection for personnel engaged in the work.
- Where guarding must be removed to facilitate the work in progress, the guarding shall be replaced in original condition upon completion of the work and the unguarded area shall not be unattended until the guarding is replaced. The project manager/supervisor shall enforce this requirement with the responsible parties.

1.14 Hazardous Energy Control/Lock Out/Tag Out-WAC-296-803

Requirements and university operations undergo periodic review. A comprehensive Lock and Tag Out program, project specific JHA and or HASP shall be implemented by the project manager/supervisor as required prior to start of work, and all effected personnel shall be trained in the control of hazardous energy.

1.15 Personal Protective Equipment (PPE) - WAC-296-800-160

CWU's Personnel Protective Equipment Program is to facilitate compliance with requirements. The Project Manager/Supervisor is responsible for procuring, and supplying personal protective equipment to all workers requiring PPE. The EH&S department shall review and or approve all PPE request prior to procurement.

- PPE shall be identified in project specific JHAs for all CWU operations and processes. PPE may include but not limited to the following:
  - Hard Hats - WAC-296-800-16055.
  - Foot Protection - WAC-296-800-16060.
  - Eye and Facial Protection - WAC-296-800-16050.
  - Respirators - WAC- 296-841,842.
  - Hearing Protection - WAC-296-817-20010, 20015
  - Hand Protection, Leather Gloves, Chemical Gloves and or Suits - WAC-296-54-51140
  - Fall Restraint - WAC-296-155-24615

1.16 Chemical Hygiene Plan - WAC-296-828-200

CWU's Chemical Hygiene Plan is for activities conducted in the Laboratory/Chemical Room. As a minimum, the following shall be performed when working in this area.

- Review and sign the Laboratory/Chemical Standard Operating Procedure/Hygiene Plan, SOP and or JHA if applicable before starting work.
- Do not smell or taste any chemical or unknown substance.
- Do not eat, drink, smoke, chew gum or apply cosmetics while in the lab.
- Absolutely NO mouth pipetting or starting or siphons by mouth suction.
- No horseplay or practical jokes.
- PPE such as safety glasses, chemical resistant gloves, respirator, and lab coats are required as needed. Note: Activate and assure fume hood is in good working condition and appropriate filtration is used.
- No loose or abbreviated clothing worn. No ties, scarves or loose jewelry.
- No open toed shoes.
- Avoid working alone if possible.
- Know the location of emergency equipment (spill response equipment, eye wash fountain fire extinguisher).
- Always wash hands after leaving the lab.
- Store and return all chemicals to designated areas when finished, and assure all chemical transfers to secondary containers are properly identified.
- Clean up all spills immediately.

1.17 Respiratory Protection - WAC-296-841,842

CWU's Respiratory Protection Program is for the prevention and mitigation of respiratory hazards. As a minimum, the following should be performed when using respirators and or exposed to airborne contaminants.

- Training and certification shall be conducted by an approved/authorized trainer and or training organization prior to dawning respiratory protection.
- Personnel exposed to inhalation of contaminated, toxic, or hazardous atmospheres, respiratory protection shall be worn.
- Care, cleaning and maintenance of respirators shall be conducted as needed.
- Review and sign project specific SOP and or JHA before starting work.
- EH&S representative and or the qualified supervisor shall review and approve all respiratory protection.

1.18 Environmental Controls

- All Environmental controls shall be identified in project specific JHAs.

- Exhaust Fumes - Equipment powered by internal combustion engines shall not be operated in or near enclosed or confined workspaces without proper ventilation controls.
- Welding Flashes - Where welding operations are not transient, but set up on an extended basis, work shall be screened to prevent accidental flash to workers.
- Sweeping - Where sweeping of floors creates excessive dust in enclosed or confined workspaces, the floor should be wet down or sprinkled with sweeping compound to control dust. Personnel sweeping floors should wear disposable dust masks if needed.

- Asbestos - Work with asbestos or asbestos-containing materials requires extensive safety controls and formal training. All requirements shall be identified on project specific JHAs and in Asbestos Abatement Work Plans.
- Toxic and Contaminated Atmospheres - Exposure by inhalation from such materials can be present in the form of gases, vapors, fumes, dusts, mists, liquids, adhesives or solids. When working with such materials the following controls should be implemented.
  - Follow manufacturer's recommendations for use, storage and PPE.
  - Where exposure to hazardous substances cannot be reduced to safe levels by ventilation, appropriate PPE shall be used.
- Heat Stress - Supervisors are responsible for monitoring weather and temperature-related conditions, which could cause heat related illness or injury and providing measures for mitigating such hazards.
- Hearing Protection - WAC-296-817 - CWU's Hearing Protection Program is for the prevention and mitigation of noise hazards. As a minimum the following should be performed when exposed to excessive noise.
  - Personnel exposed to excessive noise levels for prolonged periods shall wear approved hearing protection. Personnel may not be exposed to more than 85dba within a continuous eight (8) hour period. For example breaking concrete with an air hammer produces 95 decibels of sound. Personnel may not be exposed to 95 dba for more than 4 hours without controls or protective equipment. Personnel exposed to excessive noise or noise producing equipment shall implement the following:
  - Rotate or replace personnel on noisy work to reduce time of exposure.
  - Utilize when possible, equipment that has been engineered to run quiet or is equipped with mufflers and or sound reducing accessories.
  - Where it is not feasible to employ the first two controls, or where they fail to reduce noise to safe levels, issue personal protective equipment to personnel and enforce its use. PPE may consist of earplugs and or earmuffs designed to protect hearing.
- Radioactive Materials - Only persons specially trained in Radiation Worker Safety in the safe use and storage of radioactive materials shall be permitted to work with such materials, and will be addressed in project specific Radiation Protection Procedures/Programs, HASPs and or JHAs.
- Flammable or Explosive Atmospheres - Where the use of flammable and combustible materials such as gases, adhesives, paints, or sealers may cause a buildup of an explosive or flammable atmosphere in a confined area, the area shall be well ventilated by natural or mechanical means. Smoking, open flames, or other sources of ignition in the area shall be eliminated. At least one Multi-Class ABC dry chemical type fire extinguisher shall be available within 25 feet outside of the area.

1.19 Control of External Environmental Contaminants

The project manager/Supervisor shall evaluate and implement approved controls for these activities.
Frequently regulated environmental contaminants are as follows:

- Emissions of smoke, dust and other identified airborne contaminants.
- Noise from cranes, trucks, air hammers, air compressors, etc.
  - City/University ordinances can restrict operations of this type of equipment to limited hours of the day in some residential and or commercial areas of the community.
- Excessive disturbance of dust, dirt and mud from construction or other operations on streets and sidewalks.
- Prompt and regular cleanup of all debris shall be enforced.

1.20 Work in Occupied Structures

All activities taking place in or close to occupied structures create special safety hazards for the occupants, increasing our exposure to liability claims. Supervisors must be aware that occupants are unfamiliar with our activities and processes, and that special controls are required for the safety of the structure and its occupants.

- Where sub-contractors do any work in occupied structures that may require any of the controls set forth below, the work shall not proceed without approval of the supervisor at least 24 hours in advance.
- Where occupants may be exposed to excessive noise and or vibration, alternate methods and equipment should be employed. Tools, machinery and other related equipment should be fitted with mufflers and sound damping accessories when applicable in such circumstances. When feasible, work activities should be scheduled on off hours.
- Where occupants can be exposed to welding flashes, laser beams, or other forms harmful light, the work shall be rescheduled, screened and or eye protection worn.
- Where occupants may be exposed to excessive and or prolonged durations of contaminated atmospheres caused by gases, vapors, fumes, dusts, mists, and or odors, occupants shall be isolated from these areas by physical segregation and or appropriate ventilation to reduce or remove contaminants by natural or mechanical means.
- Where occupants may be exposed to flammable or combustible atmospheres, natural or mechanical ventilation shall be employed to reduce exposure and or ignition if possible.
- The use of equipment powered by internal combustion engines inside of closed and or unventilated structures is prohibited.
- Where fire or smoke alarms may be set off due to work activities, the Project Manager/Supervisor shall coordinate the work with building management to prevent false alarms. Temporary isolation or deactivation of the alarm system may be required.
    - **When work is complete and or halted for extended durations, the alarm (s) shall be reactivated.**
- When smoke, fumes, odors, etc. from work activities are dispersed into occupied areas through air intakes or air handling systems, the Project Manager shall coordinate such activities with building management to control and or eliminate the hazard.

1.21 Confined Spaces - WAC-296-809

Requirements and university operations undergo periodic review. However when confined space requirements are applicable to CWU operations and processes, a comprehensive confined space entry procedure/permit and project specific JHA, and or HASPs shall be developed by the Supervisor prior to start of work. All affected personnel shall be trained and or certified to enter confined space areas. A confined space may have the following characteristics.

- Is large enough that a person can enter and perform work.
- Is not designed for continuous personnel occupancy.
- Potential for a hazardous atmosphere.
- Potential for engulfment of an entrant.
- Potential for an entrant to be trapped or asphyxiated by inwardly converging walls, or a floor which slopes downward and tapers to a smaller cross-section.
- Contains any other recognized serious safety or health hazards.

1.22 Fall Protection - WAC-296-155

Requirements and university operations undergo periodic review. However when fall protection requirements become applicable to CWU operations and processes, a Comprehensive Fall Protection Procedure shall be developed and or project specific Fall Protection Plan, JHA and or HASP shall be developed by the Project

Manager/Supervisor prior to start of work. All effected personnel shall be trained in the use of fall protection equipment.

1.23 Excavation - WAC-296-155 Part N

CWU shall coordinate and maintain an alarm system, e.g., siren, horn or other communication system, where personnel, students, visitors, and the local fire department can be alerted for an emergency. Should evacuation be necessary use the closest exit to your area. Emergency exits are commonly located on each floor, and are typically marked by illuminated "EXIT" signs. In the event that evacuation is necessary, use the closest exit. Stay in the area until released by the building monitor, or fire/university officials. This is necessary to assure that all students and employees have evacuated the building and are accounted for. Faculty, staff and students collocated at CWU facilities are responsible for complying with, and familiarizing themselves with the evacuation procedures/exits for the applicable facility.

1.24 Ergonomics

Is the science and practice of designing jobs, equipment, and or workplaces to correctly address the capabilities and limitations of the employee. Ergonomics considers the physical and mental processes and limits of each person as she/he interacts with tools, equipment, work methods, tasks, and the working environment. A goal of CWU is to reduce work-related musculoskeletal disorders (WMDS) such as tendonitis, carpal tunnel syndrome, and low back disorders, by adapting the work to fit the person, instead of forcing the person to adapt to the work. These assessments will be evaluated on a case by case basis as needed and performed by a competent person familiar with ergonomic awareness education.

CWU shall ensure that faculty, staff and students working in or as requested by CWU receive ergonomics awareness education at least once every three years or as working conditions change. CWU may provide ergonomics awareness or may rely on education provided by another employer or organization if requested.

Should employees be assigned to work in or supervise "caution zone jobs" they must receive ergonomics awareness education within 30 days of start of work, unless they have received in the past three (3) years. CWU shall inform employees/students on work-related causes of musculoskeletal disorders, by oral presentations, videos, computer- based presentations, or written materials with discussions including but not limited to information on work related causes of musculoskeletal disorders, including all caution zone factors, types, symptoms, and consequences of WMSDs and the importance of early reporting information on identifying WMSD hazards and common measures to reduce them. CWU shall implement and develop best practices, conduct demonstration training, and provide information on ergonomics if requested.

1.24.1 Computer work stations

CWU recognizes that the use of computer display monitors and keyboards can result in adverse health effects that appear to be due to incorrect ergonomic factors. Every effort shall be made to provide computer workstations that are adjustable to the needs of each user. Work station design, work practices, and training can be provided by a certified and or licensed ergonomics provider for employees who normally work at computer keyboards for four (4) or more hours per day if requested. (i.e. Human Resources Department)

"A caution zone job" is a job where an employee's typical work activities include any of the specific physical risk factors such as but not limited to awkward posture, high hand force, highly repetitive motion, repeated impact, heavy, frequent or awkward lifting, moderate to high hand-arm vibration. The following are examples of caution zone jobs:

- Intensive keying - Keying with hands or fingers in a rapid, steady motion with few opportunities for temporary work pauses.
- Moderate hand-arm vibration levels - Tools with vibration values between 2.5 and 10 meters per second squared eight hour equivalent. Examples include some grinders, sanders, and jig saws.
- High hand-arm vibration levels - Tools with vibration values equal to or greater than 10 meters per second squared eight-hour equivalent. Examples include some impact wrenches, carpet strippers, chain saws, and percussive tools.

1.25 Fire Prevention and Protection - WAC-296-24-567

1.25.1 Evacuation

CWU shall coordinate and maintain an alarm system, e.g., siren, horn or other communication system, where employees, students and visitors, and the local fire department can be alerted for an emergency. Should evacuation be necessary use the closest exit to your work area. In the event that evacuation is necessary, use the closest exit. Stay in the area until released by the building monitor, or fire officials. This is necessary to assure that all employees have evacuated and are accounted for.
Note: Employees collocated at contractor facilities are responsible for complying with, and familiarizing themselves with the evacuation procedures for the applicable facility.

1.25.2 Flammable Liquids

- Only approved U.L. safety cans shall be used for handling and use of flammable liquids in quantities greater than one gallon, except that this shall not apply to liquids which are extremely hard to pour. For quantities of one gallon or less, the original container may be used.

- An approved U.L. safety can is a closed container, of not more than five (5) gallons capacity, having a flame arresting screen in the pour spout and a spring closing lid and spout cover. Flammable liquids shall be kept in approved containers when not actually in use.

- Indoor Storage of Flammable and Combustible Liquids.
  - No more than twenty-five (25) gallons of flammable and combustible liquids shall be stored in a room outside an approved U.L. approved flammable liquids storage cabinet.
  - An approved cabinet should be of metal construction, bearing the Underwriters Laboratories (UL) approval or similar.
  - No more than sixty (60) gallons of flammable liquids shall be stored in one cabinet and no more than three (3) cabinets shall be permitted in a single storage area.

- Standby Fire Extinguishers - Provide standby fire extinguishers as follows:
  - At least one portable multi-class ABC dry chemical fire extinguisher with a minimum rating of 2A:20BC shall be located outside of, but not more than ten (10) feet from the door opening of any room used for the storage of more than sixty (60) gallons of flammable or combustible liquids.
  - A portable multi-class ABC dry chemical fire extinguisher with a minimum rating of 2A:10 BC shall be provided within fifty (50) feet of all welding operations, torch cutting operations or wherever more than five (5) gallons of flammable or combustible liquids or five (5) pounds of flammable gas are being used.

1.25.3 Cutting, Welding, and Brazing -WAC-296-24-680

Requirements and university operations undergo periodic review. When welding operations become applicable to CWU operations and processes, a Comprehensive Welding Procedure shall be developed and or a project

specific JHA and or HASP by the Supervisor prior to start of work. All affected personnel shall be trained and or certified in the use of welding equipment. The following requirements shall apply to all electrical welding, oxy-acetylene fusion welding and cutting, brazing, welding, electric resistance or induction welding, forge and flow welding.

- Welding and cutting operations are prohibited in or near areas or equipment containing flammable vapors, dusts, or liquids, on or in closed tanks or other containers that have held flammable liquids until all fire and explosive hazards have been eliminated as prescribed in the American Welding Society's recommended procedure for welding or cutting of containers that have held combustibles.
- If the work to be performed is within a building equipped with an operative sprinkler system, the sprinkler system must be operational during cutting and welding operations unless specific permission is granted by a manager. Should sprinklers be within three feet of the welding torch, suitable protection by baffle or fire retardant wrapping must be used to prevent fusing.
- When practical, remove the object to be welded, or cut, to a safe location designated for such work.
- If the object to be welded or cut cannot be readily moved, all movable fire hazards in the vicinity shall be taken to a safe place at least thirty feet from the cutting or welding protection.
- If the object to be welded or cut cannot be moved and if all fire hazards cannot be removed. After the combustible floors have been swept clean, they should be protected by flameproof tarpaulins or the equivalent or, if practical, the area may be wetted down
- In all cases, operators of welding and cutting equipment shall be competent personnel, certified by the local jurisdiction where applicable.
- All equipment shall be placed so that it is clear of passageways, ladders, and stairways.
- Helmets or hand shields shall be used during all arc welding or arc cutting operations and shall be arranged to protect the face, neck and ears from direct radiant energy from the arc.
- Welder goggles or other suitable eye protection shall be used during all gas welding or cutting operations.
- Welders' gauntlet gloves, sleeve protectors, and aprons shall likewise be used by the operator.
- Suitable barriers, protecting screens, and warning signs should be used to protect the visitor or others not involved in the welding or cutting operations.
- All personnel using fuel gas such as propane, acetylene, oxygen, & etc. shall be instructed in their safe use as set forth in WAC-296-24-680.
- Cylinders shall be kept far enough away from the actual welding or cutting operations so that sparks, hot slag, or flame will not reach them. When this is impractical, fire resistant shields shall be provided.
- Cylinders shall be placed where they cannot become part of an electrical circuit.
- Cylinders shall not be subjected to flame, hot metal or other sources of artificial heat.
- Fuel gas cylinders shall not be taken into confined spaces.
- Oxygen cylinders, fittings and accessories shall be kept free of oil and grease.
- All manifolds, regulators, couplings, hoses and torches shall be inspected prior to each day use to see that they are in safe condition and free of leaks. Defective equipment shall be taken out of service and repaired or replaced.
- Before welding torch-cutting operations take place, all moveable fire hazards and combustible materials in the vicinity shall be removed or otherwise protected. If fire hazards cannot be removed, positive means shall be taken to confine the heat, sparks and slag.
- No welding or torch cutting shall be performed in areas where flammable atmospheres exist due to heavy concentrations of flammable paints, gases, fumes, dusts or compounds.
- When welding or torch cutting is performed on walls, floors and ceilings, since direct penetration of sparks, slag or heat transfer may introduce a fire hazard to an adjacent area, the same precautions shall be taken on the opposite side on which the work is being performed.
- Whenever torches are not to be used or left unattended for more than thirty (30) minutes in confined or

enclosed spaces, the gas supply shall be shut off at the regulator. Overnight, the torch and hose shall be removed from the enclosed space.

- When the welding or torch cutting operation is such that normal fire prevention precautions are not sufficient, additional personnel shall be assigned to guard against fire while the actual work is being performed, and for a sufficient period after completion of the work to ensure that no possibility of fire exists. Such personnel shall be instructed as to the specific anticipated fire hazards fire reporting procedures and how fire-fighting equipment provided is to be used. .
- Heaters shall be located at least six (6) feet away from propane cylinders.
- Heaters shall not be directed toward any propane cylinder within twenty (20) feet.
- Heaters shall be located at least ten (10) feet away from tarpaulins, plastic sheeting, or canvas coverings or closures. Coverings and closures shall be securely fastened to prevent being blown onto the heater by the wind.
- Either sufficient fresh air or ventilation shall be provided naturally or mechanically to maintain the health and safety of the personnel, ensure proper combustion and prevent excessive temperature rise in the heated area.
- The use of open fires of wood, paper or other combustible materials is prohibited.
- Employees collocated at contractor facilities are responsible for complying with, and familiarizing themselves with the evacuation procedures for the applicable facility.

1.25.4 Fire Hazards/Alarms

<u>If you discover a fire:</u>

- Activate the fire alarm and call or have someone else call 911
- Tell other employees/students in the area to evacuate.
- Go to the designated staging area outside the building if applicable.
- If you are a supervisor notified of a fire in your area: Tell your employees, students and visitors to evacuate to the designated staging if applicable.
- The building administrator (if applicable) shall conduct a roll call of all employees, students and visitors to verify that all have been evacuated from the building and accounted for.
- Verify that 911 has been called.
- Determine if the fire has been extinguished. If the fire has grown or there is thick smoke, evacuate any employees, students and visitors trying to fight the fire.
- If an employee, student and or visitor is unaccounted for, **do not re-enter the building**! Notify the responding fire personnel that a person is missing and or unaccounted for and may be in the building.

Fire hazards at CWU are those typical in university settings and are not significant unless equipment is not maintained, cooking, smoking and or house-keeping practices are poor. In the event of a fire, the building alarm system shall be activated manually or by heat or smoke. If a fire is detected, call 911 and or activate the main alarm system panel located in your area and evacuate the building immediately. If the fire is in its early stages and employees/students are trained in the general principles of fire extinguisher use, use fire extinguishers to extinguish the fire.

Note: In laboratories where chemicals are present and quantities of flammable and or combustible compounds are used in research and development activities. Building fire suppression systems and safe work practices shall be implemented to control and mitigate fire hazards. CWU employee/students working/living in these areas shall be familiar with the building Emergency Plan and or the Laboratories Chemical Hygiene Plan.

New and or additional fuel sources will be approved by the Laboratory/Chemical Room project manager/supervisor and or the EH&S Representative prior to incorporation in all processes.

1.25.5 House Keeping WAC-296-155-020

In order to keep accumulations of flammable and combustible materials from creating a hazard, management shall insure that trash is emptied on a regular basis, and work place storage areas are free from accumulation of materials that could create hazards. Secure stored items such as bundles, containers, and bags to prevent them from falling, sliding, or collapsing. Accumulated waste packaging material will be disposed of regularly, and fuel sources shall be stored in approved containers.

1.25.6 Fire Extinguishers - WAC-296-800-300

If a fire is in its early stages and employees are trained in the general principles of fire extinguisher use, then an attempt to extinguish the fire should be made.

In the chemical /laboratory areas, quantities of flammable or combustible compounds are used in research and development activities. Building fire suppression systems and practices shall be used to control and mitigate the hazards associated with these hazards. CWU employee/students working in these areas shall be trained in accordance with the Chemical Hygiene Procedure.

However if employees/students are trained in general use of fire extinguishers, and the fire is in its early stages. Then attempt to extinguish the fire. If unable to extinguish the fire, call 911 and evacuate the building and report to the staging area if applicable.

1.26 Earthquakes

The west coast of the United States is subject to earthquakes. There will be no advance warning. The shock will be your only warning. Drop, cover, hold under a table or desk or against an inside wall NOT in a door way- until the shacking stops. After the shacking stops, check yourself and others for injuries and move toward the nearest exit or alternate route. Evacuate the building and go to your nearest evacuation assembly point for more information and critical updates.

<u>If you are inside a building:</u>

- Drop under a desk or table, cover your head and hold on. Stay away from windows, heavy cabinets, bookcases or glass dividers.
- When the shaking stops, Supervisors, Department Chair, and or the EH&S Representative are to check for damage and available evacuation routes, then begin an evacuation of their area to the designated assembly location.
- Evacuation should proceed as quickly as possible since there may be aftershocks.
- Supervisors/building monitors must account for each employee in their work group as quickly as possible.
- First aid certified employees/students should check for injuries and help evacuate injured employees/students and visitors. Do not attempt to move seriously injured persons unless they are in immediate danger of further injury.
- If gas odors is in the building, tell a supervisor to secure the sources(s).
- Supervisors, students and first aid employees must not re-enter the building once evacuation is complete.
- Check mobile devices, radios etc. for updated information as available.

<u>If you are outside:</u>

- Stand away from buildings, trees, telephone and electrical lines.

If you are on the road:

- Drive away from underpasses/overpasses. Stop in a safe area. Stay in the vehicle.

1.27 Bomb Threats

In the event of an unconfirmed bomb threat, call 911 and notify all personnel to evacuate the facility and report to the staging area (if applicable). All personnel shall remain at the staging area until given the all clear and released by emergency responder personnel.

1.28 First Aid - WAC-296-800-150

The potential for accidental injury at CWU is possible. If you have an injury requiring first aid, notify your project manager and or supervisor. First aid stations/kits are located throughout most facilities. All CWU company vehicles are equipped with a first aid kit and fire extinguisher. These kits are checked semi-annually by a designated competent person from the operations division. CALL 9-1-1

Aids/HIV and Hepatitis B are the primary infectious diseases of concern in blood. **All blood should be assumed to be infectious.** These diseases can both be deadly. Employees are **not** required to perform first aid as part of their job duties. In the event of a bleeding injury where first aid is needed, always use gloves if possible to prevent exposure to blood or other potentially infectious materials. The injured party can often help by applying pressure to the wound. Gloves and a mouth barrier for rescue breathing are available in most first aid kits. If you are exposed to blood while giving first aid, wash immediately with soap and water and report the incident to your project manager. The appropriate follow-up procedures will be initiated, including but not limited to medical evaluation, counseling, Hepatitis B vaccine and or blood testing of the source person if possible. For further information, refer to WAC- 296-823.

1.29 Emergency Services

CWU and/or designated person shall provide the following emergency services:

- First Aid Kit - A first aid kit suitable for treating minor injuries, which do not require the services of professional medical personnel.
- Shall be available for use in the main floors and or facilities.
- The kit shall consist of a weatherproof container with individually sealed packages for each type of item contained.
- It shall be conspicuously placed where it is readily accessible for use by all personnel.
- The contents of the kit should be checked periodically and expended items replaced.
- Laboratory /Chemical Room first aid kits should be reviewed to make sure that they have adequate supplies to meet any potential chemical exposure as outlined in the onsite SDS.
- Department supervisors shall evaluate their first aid kit to determine contents are adequate to treat minor injuries.
- The emergency response phone number, 9-1-1, or other local contact phone numbers, if 9-1-1 is not available, shall be posted on all floors and in all facilities.
- Provide ambulance service for prompt transportation of injured personnel to the hospital.
- Furnish the name, address of the workers compensation insurance carrier,
- Local fire departments provide excellent ambulance service with para-medic or rescue squad capabilities, their services are preferred over private ambulance services. Where ambulance service is not readily available to the job site in terms of time (20 minutes) and distance (5 miles), alternate means of transportation must be provided.
- Where a physician, clinic, and/or hospital is not readily available in terms of time (20 minutes) and distance (5 miles) for treatment of injured personnel, a person who has a valid certificate in first aid training from the American Red Cross or equivalent shall be available to render first aid and or CPR.

- Where local fire departments are not readily available to the job site in terms of time (20 minutes) and distance (5 miles), a trained and equipped firefighting organization (Fire Brigade) shall be provided to assure adequate protection to the lives of personnel in case of fire.

1.30 Access Control and Protection for the Visitor

Steps shall be taken to control hazards to the visitor and to reduce CWU's exposure to liability claims. Therefore, before project initiation, the supervisor shall review project scope to identify hazards during the course of the work and what controls are needed to protect the visitor. If CWU projects and or processes identify the need to control project specific entry points and personnel, all project specific information and requirements shall be identified on project specific JHAs and or HASPs and the Site Entry Authorization Form implemented as needed.

Site Entry Authorization Form - All project related personnel, and or sub-contractors shall sign-in on a site entry authorization form. The Site Entry Authorization Form includes company, agency, or organization, purpose of entry, company representative, time in and time out, date, and reported by. The general purpose of the form is to log all visitor and personnel access, purpose of entry and to assist emergency management personnel in locating all personnel in the event of an emergency.

As work on the project progresses, supervisors shall continually monitor the work site for new hazards that may arise and implement controls as needed. During the life of the project all items installed for visitor safety shall be inspected and maintained regularly and maintained in good condition.

Supervisors shall enforce all requirements for visitor protection where work creates hazards to the visitor.

Visitor protection shall conform to all local codes/laws as well as the following:

- Projects and open perimeters should be fenced to prevent unauthorized or inadvertent entry by the visitor.
- Fences should be free of projections that may cause injury and or tripping hazards.
- Areas on the visitor side of fences shall be kept free of debris and materials.
- Bases and support members of fences shall be so constructed as to prevent accidental displacement of the fence by high winds or if struck by vehicles.
- Openings in fences for the passage of vehicles and personnel shall be equipped with gates incorporating the same safety features required for fence construction. Gates shall be equipped with locking devices and shall be closed and locked during non-working hours.
- Where the erection of fences is not immediately feasible due to the nature of the work, or where fences must be temporarily taken down to facilitate the work, alternate protection such as barricades, caution or danger tape shall be provided.
- CWU shall assign personnel to act as a flag person or signalperson to direct vehicular traffic under their control. Such personnel shall be instructed and certified in the proper procedures of traffic controls as outlined by the requirements within the Manual on Uniform Traffic Control Devices (MUTCD), WAC 296- 155.
- CWU shall provide for the prompt and conspicuous posting and maintenance of Danger Signs, Caution Signs and Safety Instruction Signs as required to alert personnel of hazards and rules and regulations.

1.31 House Keeping, - WAC-296-800-220

The supervisor/lead shall maintain and implement a housekeeping program at the beginning of each project as needed. The following housekeeping rules should be enforced:

- Assure sub-contractors understand contractual obligations regarding cleanup and removal of debris from work areas.
- Schedule for prompt garbage removal.
- Hoses, extension cords, welding leads, etc., shall be kept out of walkways and stored away when not in use.

- Combustible debris shall be removed on a daily basis.
- Work areas shall be kept clean as work progresses.
- Oil and grease spills shall be cleaned up at once.
- When dusty conditions occur, sweeping compound and or water shall be used to reduce dust. Effected personnel shall wear appropriate (PPE) and or eye protection as needed
- CWU shall provide project personnel with adequate potable drinking water and toilet facilities at all projects while work is in progress.
    - **WARNING - There shall be no cross-connection, open or potential between a system furnishing potable water and a system furnishing non-potable water.**

1.32 Material Storage - WAC-296-32

CWU sub-contractors and or project specific personnel storing material at CWU should consult supervisors for appropriate storage areas and safe delivery routes.

- CWU shall designate safe locations for bulk storage outside of the facility.
- Material shall not be stored in aisles, walkways, doors, or loading areas that may block exits and or cause tripping hazards.
- Materials stored in racks shall be stacked, racked, blocked, interlocked or otherwise secured to prevent sliding, falling or collapse.
- Cylindrical material such as pipe, and gas cylinders are to be secured in racks, and or stacked and blocked.
- Materials shall not be stacked closer than 24 inches from ceiling fire suppression equipment.

1.33 Excavation/Trenching - WAC-296-45-195

Requirements and university operations undergo periodic review. However in the event excavations become applicable to CWU operations and processes, a comprehensive excavation procedure, project specific JHA and or HASP shall be developed by the supervisor prior to start of work. Before opening any excavation, contact with local authorities shall be made to determine any presence of underground installations; i.e., sewer, telephone, water, fuel, electric, gas lines, etc. When excavation activities approach such an area, exact locations shall be determined, and once uncovered, proper supports and or protection should be supplied. In addition,

- A copy of the soils report must be kept onsite during excavation operations. A copy of the soils report must be forwarded to the CWU Project Manager before excavation operations begin.
- Walls and faces of excavations in which personnel are exposed to danger from moving ground shall be guarded by shoring, and sloped to the proper angle of repose, or some other equivalent means.
- Excavations 4' deep or deeper shall require a means of egress every 25'. This means of egress may be a ladder, stairways or ramp.
- Excavations in which personnel may be required to inter, excavated material shall be kept back at least 2 feet from the edge of the excavation.
- Water shall not be allowed to accumulate in an excavation. Diversion ditches, dikes, or other suitable means shall be used to prevent surface water from entering an excavation and provide adequate drainage of the area adjacent to the excavation.
- Adequate physical barrier protection shall be provided at all remotely located excavations into which persons may fall and not be able to climb out because of steepness of sides. Wells, pits, shafts, etc., shall be barricaded or covered.
- Walkways and ramps over excavations shall be constructed of 2 inch planking, or equivalent with guardrails on both sides.
- If it is necessary to place or operate excavating machinery or trucks on a level above and near an excavation, the side of the excavation shall be sheet-piled or shored, and braced as necessary to resist extra pressure of

such superimposed loads.
- If mobile equipment is used or allowed adjacent to excavations, substantial stop logs or barricades shall be installed.
- Sides of trenches more than 5 feet deep shall be shored or sloped back to the angles of repose.
- Trenches 4 feet deep or more, shall have an adequate means of exit, such as a ladder or steps located no more than 25 feet of lateral travel.
- Portable trench boxes or sliding trench shields may be used for the protection of personnel in lieu of shoring or sloping. They shall be designed and constructed to provide protection equal to or greater than shoring required for the trench.
- Open excavations in the visitor way shall be securely covered over with 2" planking, or 3/4 plywood or its equivalent, or guarded on all open sides with a standard guardrail during non-working hours.
- All pits, shafts, or steep sided excavations shall be covered with 2" planking or 3/4" plywood, or its equivalent and guarded with a standard handrail on all open sides during non-working hours.

1.34 Forklifts/Man Lifts/Heavy Equipment – WAC-296-863

Requirements and university operations undergo periodic review. CWU operations shall develop a comprehensive procedure, project specific JHA, and or HASPs shall be developed by the project manager/supervisor prior to start of work, and all effected personnel shall be trained and or certified to operate such equipment.

1.35 Blood borne Pathogens - WAC- 296-823

This blood borne pathogen exposure control section provides precautions necessary for CWU personnel to use when occupationally exposed to blood, bodily fluids and other potentially infectious materials. These materials may cause diseases such as hepatitis B (HBV) and human immunodeficiency virus (HIV).

1.35.1 Methods of Compliance

Universal Precautions shall be observed AT ALL TIMES to prevent contract with blood or other potentially infectious materials.
- All body fluids shall be considered potentially infectious materials.
- Access to the contents of the site first-aid kit shall be restricted to field personnel. This precaution is to minimize the potential of first aid supplies becoming contaminated with an injured person's body fluids.
- Any injured personnel will report to the project office, and be provided first-aid supplies, i.e. cleansing solution, Band-Aids, aspirin, etc., for minor injuries.
- Should a serious injury be incurred to an**y** personnel on the job site which results in extensive bleeding, and other persons come to the insured's assistance (Good Samaritan) and is contaminated with the insured's blood, this person will also be offered the hepatitis B vaccination free of charge.
- Any tools, materials, or equipment contaminated with human blood or other body fluids shall be cleaned and decontaminated prior to being put back into service.
- Any soil, material or other items, which cannot be cleaned or decontaminated, shall be disposed of in an approved manner.
- A simple disinfectant, and or decontamination solution may be made of 1 part household bleach and 1 to 10 parts of water
- Training will be provided by an approved medical provider. Personnel shall cover all topics specified in the Blood borne pathogens standards.
- Personnel shall have a copy of the blood borne pathogens standards.
- Management shall retain all training records in employees personnel file.
- Training shall include, but not be limited to:
  - WAC-296-823 Occupational Exposure to Blood borne Pathogens.

- Explanation of what blood borne pathogens are.
- Modes of transmission.
- Company compliance program.
- How to handle exposure incidents.
- Use of personal protective equipment.
- Availability of vaccination if exposed to blood borne pathogens.
- Eligibility of a follow-up program after an exposure incident.
- Personal hygiene.

1.35.2 Safe Work Practices

- Universal precautions should be observed at all times when working with bodily fluids.
- Hands shall be washed with soap and water and/or a disinfectant solution immediately after gloves are removed.
- Areas and equipment that become contaminated with blood or body fluids should be cleaned immediately with a bleach solution. The bleach solution should be freshly made at the time of the spill. The concentration should be ¼ cup of bleach per gallon of water.
- Wear personal protective equipment included in the kit, (i.e. gloves, face shield with mask, and gown) and sprinkle the provided powder over spill area. Allow blood to solidify to a gel. Remove gelled material with the scoop and scraper provided. Carefully place material in bag provided. Clean away remaining solids and disinfect with bleach solution and or the enclosed germicidal (germ killing) cloth in kit. Place all contaminated articles including gloves in the red plastic bag. Seal the red bag and contact the EH&S department for disposal. Promptly wash hands with soap and water. If antiseptic hand cleaners or towelettes are used, hands should be washed with running water as soon as possible.

1.35.3 Hepatitis B Vaccination

- The Hepatitis B vaccine series are available to personnel, who have the potential for occupational exposure to blood borne pathogens.
- Any personnel exposed to blood borne pathogens that have not received the Hepatitis B vaccine, shall have the vaccine made available to them within 24 hours of exposure.
- The HBV vaccination series is provided at no cost by a licensed physician to the employee/student specified by CWU.
- Personnel exposed to blood borne pathogens will have medical evaluation at the time of the exposure and be placed on post-exposure follow up by a licensed physician.
- Personnel may decline Hepatitis B vaccinations. The person must sign a mandatory Hepatitis B vaccination declination statement. The person may receive the vaccination at a later date if they desire.
- If routine boosters of the Hepatitis vaccine are recommended by the U.S. department of Visitor Health, the booster shots will also be available to the personnel at no cost, and administered by a licensed physician as specified by CWU.
- At no time will an individual's decision to seek treatment effect current or future employment.

1.35.4 Post Exposure Documentation

- A person's exposure report form is to be completed as soon as possible after the exposure. Exposure means direct contact with blood or body fluids without protective equipment or not covered by protective equipment.
- An Accident Investigation Form is to be completed by the supervisor or designee under supervision of the EH&S Department..
- EH&S will keep all exposure reports for the duration of employment, plus thirty years.

- All medical records will be made available to anyone having the written consent of the subject personnel or Department of Labor representative.

1.35.5 Post- Exposure and Follow-up

Should it become known that a person who had received first-aid medical treatment on the project was confirmed to the infected with HIV or HBV, then the person(s) involved in that incident shall be provided the prescribed follow- up treatment.

Management shall make immediately available to the exposed personnel a confidential medical evaluation and follow-up, including a least the following:

- Documentation of the route(s) of exposure, and circumstances under which exposure occurred.
- Identification of the source individual, if feasible.
- Source individual's blood to be tested and the results made available to the exposed personnel, if consented to. Refer to Federal, State and Local Laws regarding obtaining consent and confidentiality for testing of blood.
- Exposed personnel's blood to be tested for HBV and HIV serological status.
- Offer HBV vaccination series to the exposed personnel.
- Provide counseling.
- Provide a written opinion in accordance with WAC-296-823.

1.35.6 Definitions

For purposes of this section, the following definitions shall apply:

- **Blood** - Human blood, human blood components, and products made from human blood.
- **Blood borne Pathogens** - Pathogenic microorganisms that are present in human blood and can cause disease in humans. These pathogens include, but are not limited to, hepatitis B virus (HBV) and human immunodeficiency virus (HIV).
- **Contaminated** - The presence or the reasonably anticipated presence of blood or other potentially infectious material on an item or surface.
- **Contaminated Laundry** - Laundry that has been soiled with blood or other potentially infectious materials or may contain sharps.
- **Contaminated Sharps** - Any contaminated object that can penetrate the skin including, but not limited to, needles, scalpels, broken glass, broken capillary tubes, and exposed ends of dental wires.
- **Decontamination**- The use of physical or chemical means to remove, inactivate, or destroy blood borne pathogens on a surface or item to the point where they are no longer capable of transmitting infectious particles and the surface or item is rendered safe for handling, use, or disposal.
- **Engineering Controls** - Controls that isolate or remove the blood borne pathogens hazard from the workplace.
- **Exposure Incident** - A specific eye, mouth, other mucous membrane, non-intact skin, or parenteral contact with blood or other potentially infectious materials that results from the performance of an personnel's duties.
- Hand Washing Facilities - A facility providing an adequate supply of running potable water, soap and single use towels or hot air drying machines.
- **HBV**: Hepatitis B virus.
- **HIV**: Human immunodeficiency virus.
- **Occupational Exposure** - Reasonably anticipated skin, eye, mucous membrane, or parenteral contact with blood or other potentially infectious materials that may result from the performance of an personnel's duties.
- **Other Potentially Infectious Materials**: (1) The following human body fluids: semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, pericardial fluid, peritoneal fluid, amniotic fluid, saliva in dental procedures, anybody fluid that is visibly contaminated with blood, and all body fluids in situations where it is

difficult or impossible to differentiate between body fluids; (2) Any unfixed tissue or organ (other than intact skin) from a human (living or dead); and (3) HIV-containing cell or tissue cultures, organ cultures, and HIV- or HBV-containing culture medium or other solutions; and blood, organs, or other tissues from experimental animals infected with HIV or HBV.

- P**arenteral** - Piercing mucous membranes or the skin barrier through such events as needle sticks, human bites, cuts, and abrasions.
- **Personal Protective Equipment** - Specialized clothing or equipment worn by an personnel for protection against a hazard. General work clothes (e.g., uniforms, pants, shirts or blouses) not intended to function as protection against a hazard, are not considered to be personal protective equipment.
- **Regulated Waste** - Liquid or semi-liquid blood or other potentially infectious materials; contaminated items that would release blood or other potentially infectious materials in a liquid or semi-liquid state if compressed; items that are caked with dried blood or other potentially infectious materials and are capable of releasing these materials during handling; contaminated sharps; and pathological and microbiological wastes containing blood or other potentially infectious materials.
- **Sterilize** - The use of a physical or chemical procedure to destroy all microbial life including highly resistant bacterial endospores.
- **Universal Precautions** - An approach to infection control. According to the concept of Universal Precautions, all human blood and certain human body fluids are treated as if known to be infectious for HIV, HBV, and other blood borne pathogens.
- **Work Practice Controls** - Controls that reduce the likelihood of exposure by altering the manner in which a task is performed.

1.36 Aviation

CWU's aviation safety policy is to insure the safety of students, faculty, flight-training contractor's personnel and the resources that make the program possible. CWU aviation shall continuously foster and improve a culture of safety where all personnel from students to senior administration, shall implement at a minimum the following objectives:

- Value the importance of adherence to Safety Policies and Procedures.
- Support and value safety above all other program objectives.
- Treat the stakeholders with respect and confidentiality.
- Work collaboratively to recognize, report, and reduce risk.

1.37 Scaffold Safety - WAC-296-874

It is the intent of CWU to provide to every extent possible, safe working conditions for those employees engaged in erection, use and dismantling of scaffolds, to encourage and direct safe work practices, and to comply in all respects with all applicable laws, regulations and standards governing the use and safety of scaffolds. The standard states that "No scaffold shall be erected, moved, dismantled, or altered except under the supervision of a "Competent Persons. "CWU policy requires that this competent person be an individual who has received sufficient formal training in the erection, moving, dismantling and alteration of scaffolding to receive a certificate attesting to this training, and that a copy of the certificate be on file in the individual's supervisor's office.

1.38 Welding Cutting & Brazing- WAC-296-24-680

It is the intent of CWU to provide to every extent possible, safe working conditions for those employees engaged in welding, cutting and brazing operations. All operators of welding and/or cutting equipment must be trained and certified to operate the equipment they will use. Appropriate safety procedures must be reviewed and understood prior to use of this equipment. Prior to performing any welding or cutting operations, welders, cutters and their supervisors must be suitably trained in the safety procedures recommended by the manufacturer for the use of their equipment.

When working with oxygen-fuel welding and cutting, those workers in charge of oxygen or fuel –gas supply equipment, including distribution piping systems and generators if applicable, must be instructed and judged competent for such work. A supervisor experienced in oxygen-fuel welding and cutting may make this judgement.

Workers who are assigned to use arc welding equipment must be properly instructed and judged qualified to operate such equipment. A supervisor experienced in arc welding may make this judgement. If gas shielded arc welding is performed, the worker must not only be familiar with the WAC Standards for welding and cutting, but also with the American Welding Society Standard A6-1-1966

1.39 Flood and Mold Remediation - WAC-246-366A

It is the intent of CWU to provide to every extent possible, safe working conditions for those employees engaged in Water/Mold remediation. CWU shall maintain conditions within CWU environment that will not endanger health and safety. Identify, assess, and mitigate or correct environmental health and safety hazards in CWU and establish necessary protective procedures, use appropriate controls, and take action to protect or separate those at risk from identified hazards, consistent with the level of risk presented by the specific hazard, until mitigation or correction is complete. Promptly inform CWU staff, students and parents about the conditions and actions taken in response. Retain for a least 6 years unless otherwise required by state or federal laws, records pertaining to health and safety inspections of CWU, including the final report findings, correction schedules, established in consultation with local health officials and recommended actions.

1.40 Rope Cable & Sling Inspection - WAC-296-155

It is the intent of CWU to provide to every extent possible, safe working conditions for those employees engaged in rigging/material handling activities. CWU will provide periodic inspections of all rope, cable & slings used for personnel and material handling operations prior to use as deemed necessary during their use, in order to ensure the safety of our workers. The use of ropes, cables and slings, regardless of whether they are made of natural or synthetic fibers, steel wire, or metal mesh, are subject to certain hazards that cannot be met by mechanical means, but only by the exercise of intelligence, care, and common sense. It is therefore essential to have personnel involved in the proper care of, use and inspection of this equipment who are competent, careful and well trained to identify visual damage during inspections, such as but not limited to.

- Kinks or severe twists;
- Nicks, breaks, frayed or unraveled edges;
- Deformed, worn or flattened surfaces;
- Corroded or pitted surfaces, or shortened or lengthened rope lays.

2.0 ENVIRONMENTAL HEALTH AND SAFETY TRAINING

Training is an essential part of providing a safe work place at CWU. All employees/students shall complete project specific training prior to beginning work as required. The EH&S Representative and or departmental supervisors are responsible for safety training as applicable. The Environmental Health and Safety Department and or department managers are responsible to verify that each employee has received an initial orientation by his or her supervisor, and has received training needed to do the job safely and that the employee training is documented. The EH&S Manager and or Departmental Chairs shall assure that an outline and materials list is available for each training course CWU provides:

Course	Who must attend
Basic Orientation	All employees (given by the employee's supervisor)
Safe Lifting	Any employee who lifts more than 20 pounds
Chemical Hazards (General)	All employees
Chemical Hazards (Specific)	All employee/students who work with or are exposed to chemical hazards.
Fire Prevention /Evacuation	All employees
First Aid/CPR	Management, supervisors, and field personnel.
Emergency Action	All employees
Respirator Training	Employees/students who use a respirator
Heat Stress	Management, supervisors, and field personnel
Radiological Worker	Employees/students who are expected to work in radiological areas.
Job Hazard Analysis	Employee/students who are expected to work around unsafe materials, chemicals, conditions and or equipment.
Personnel Protective Equipment (PPE)	Employees/students who are expected to work around unsafe materials chemicals, conditions and or equipment.

3.0 ACRONYMS

ANSI	American National Standards Institute
HASP	Health and Safety Plan
EH&SR	Environmental Health and Safety Representative
JHA	Job Hazard Analysis
SDS	Safety Data Sheets
OSHA	Occupational Safety and Health Act
PPE	Personal Protective Equipment WAC
WAC	Washington Administrative Code
WISHA	Washington Industrial Safety and Health Act
TSDF	Treatment Storage and Disposal Facility
EH&S	Environmental Health and Safety
CPR	Cardio-Pulmonary Resuscitation
RW	Radiation Worker
GHS	Globally Harmonized System

4.0 GLOSSARY OF DEFINITIONS

- An **excavation-**is any man made cavity or depression in the earth's surface formed by earth removal, and producing unsupported earth conditions by reasons of the excavation.

- A **trench-** is a narrow excavation at least 4 feet deep and not over 15 feet wide.

- **Angle of repose-** is the greatest angle above the horizontal plane at which a material will lie naturally, without sliding.

- **Ergonomics**-The science of designing the job and work place to correctly fit the worker.

- **Intensive keying**-Keying with hands or fingers in a rapid, steady motion with few opportunities for temporary work pauses.

- **Moderate hand-arm vibration levels-**Tools with vibration values between 2.5 and 10 meters per second squared eight-hour equivalent. Examples include some grinders, sanders, and jig saws.

- **High Hand- arm vibration levels-**Tools with vibration values equal to or greater than 10 meters per second squared eight –hour equivalent. Examples include some impact wrenches, carpet strippers, chain saws, and percussive tools.

- **Excavation-** Is any man made cavity or depression in the earth's surface formed by earth removal, producing unsupported earth conditions by reason of the excavation.

- **Trench-** Is a narrow excavation at least 4 feet deep and not over 15 feet wide.

- **Angle of repose-**Is the greatest angle above the horizontal plane at which a material will lie naturally without sliding.

- **Blood-**Human blood, human blood components, and products made from human blood.

- **Blood borne pathogens-**Pathogenic microorganisms that are present in human blood and can cause disease in humans. These pathogens include, but are not limited to, hepatitis B virus (HBV) and human immunodeficiency virus (HIV).

- **Contaminated-**The presence of the reasonably anticipated presence of blood or other potentially infectious materials on an item or surface.

- **Contaminated Laundry-**Laundry that has been soiled with blood or other potentially infectious materials or may contain sharps.

- **Contaminated Sharps-** Any contaminated object that can penetrate the skin, including, but not limited to needles, scalpels, broken glass, broken capillary tubes, and exposed ends of dental wires.

- **Decontamination-**The use of physical or chemical means to remove, inactivate, or destroy contamination on a surface or item to the point where they are no longer capable of transmitting infectious particles and the surface or item is rendered safe for handling, use, or disposal.

- **Engineering Controls-**Controls that isolate or remove the hazards from the workplace.
- **HBV-**Hepatitis B virus
- **HIV-**Human immunodeficiency virus
- **Occupational Exposure-**Reasonably anticipated skin, eye, mucous, or parenteral contact with blood or other potentially infectious materials that may result from the performance of a workers duties.
- **Parenteral-**Piercing mucous membranes or the skin barrier through such events as needle sticks, human bites, cuts, and abrasions.
- **Personnel Protective Equipment (PPE)-**Specialized clothing or equipment worn by persons for protection against a hazard. General work clothes (e.g. uniforms, pants, shirts, or blouses) not intended to function as protection against a hazard are not considered to be personnel protective equipment.
- **Sterilize-**The use of a physical or chemical procedure to destroy all microbial life including highly resistant bacterial endospores.
- **Universal Precautions-**An approach to infection control. According to the concept of Universal Precautions, all human blood and certain human body fluids are treated as if known to be infectious for HIV, HBV, and other blood borne pathogens.
- **Work Practice Controls-**Controls that reduce the likelihood of exposures, hazards, and accidents.
- **Safety Data Sheet (SDS)-**Product information shall have but not limited to the following- Identity, Health hazards, Fire Hazards, Reactivity, First Aid, Composition, Release measures, Handling and Storage, Exposure, PPE, Toxicological, Disposal, Environmental, Transport.