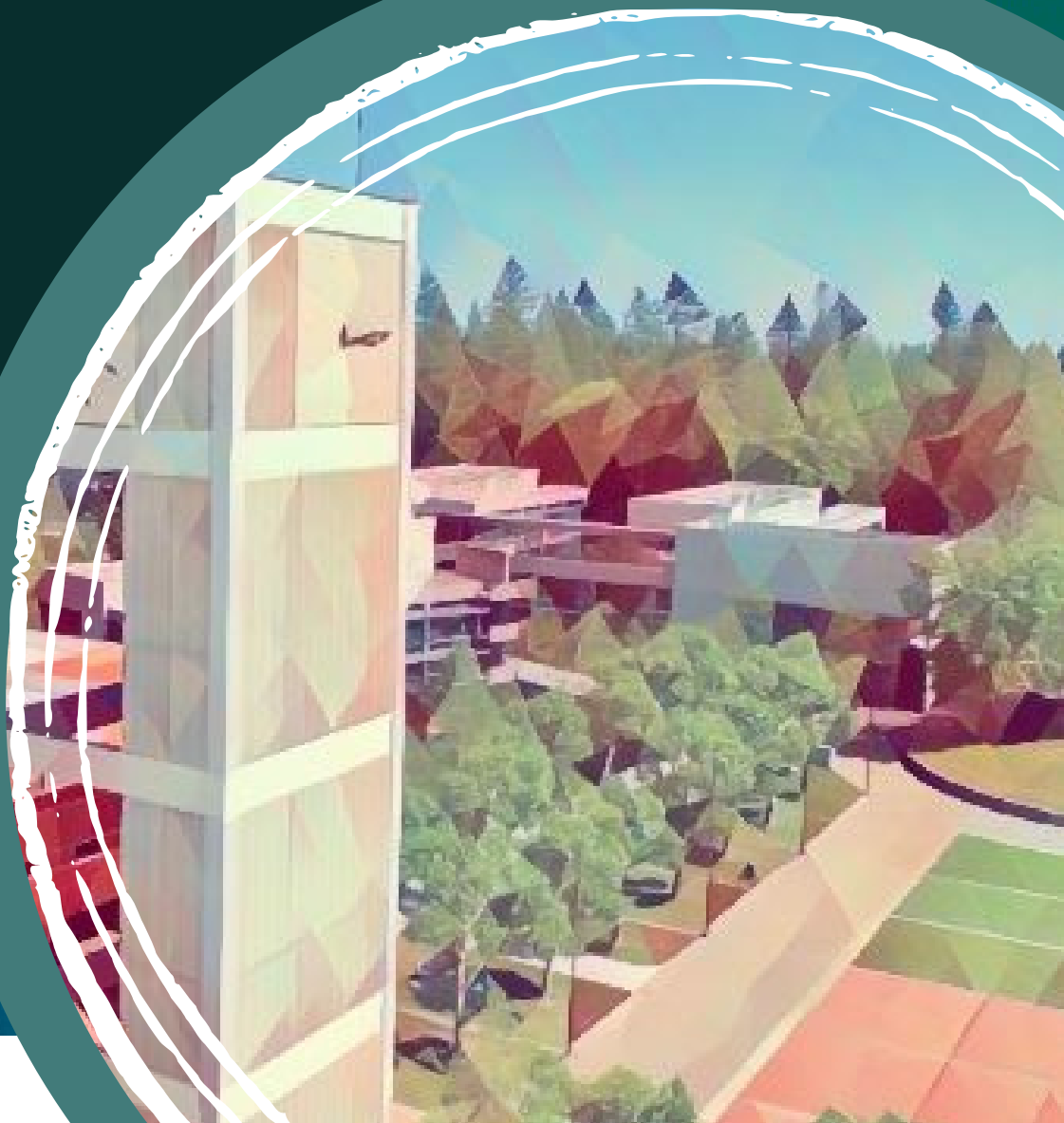
THE EVERGREEN STATE COLLEGE

ACCIDENT PREVENTION PROGRAM



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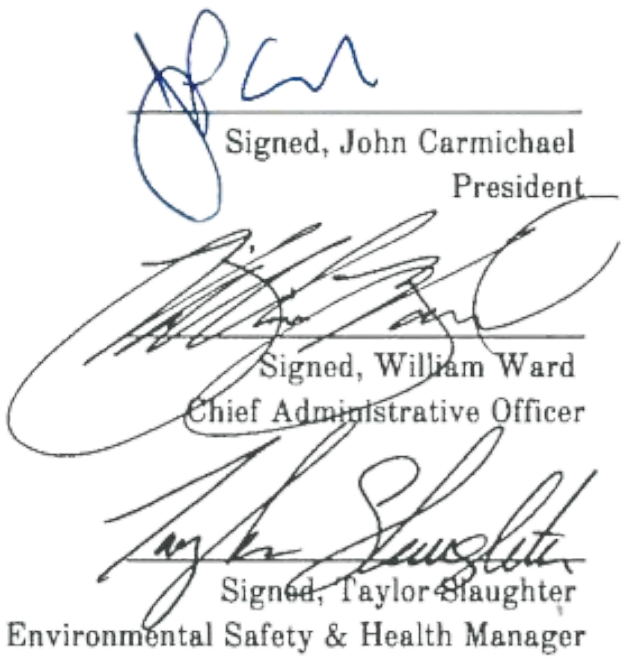
INTRODUCTION

The Evergreen State College is committed to creating, maintaining, and promoting a healthy and safe environment for all associated individuals, including students, faculty, staff, and visitors. Evergreen's Office of Environmental Safety & Health serves the campus by promoting health & safety, environmental protection, and regulatory compliance. We are committed to creating a culture where safety & health are a core value that is implemented throughout the entirety of the campus. Evergreen's accident prevention program establishes campus policies and procedures intended to prevent workplace accidents, illnesses, and injuries through effective policy. These policies support the systematic identification, assessment, elimination, and control of workplace hazards. To implement effective hazard controls, this program clearly defines safety responsibilities, identifies resources for correcting or controlling hazards, and outlines training requirements for personnel potentially exposed to workplace hazards.



ACCIDENT REPORTING

Policy Overview

Work related incident are tracked and investigated so that preventative measures can be implemented. The information contained in accident reports and investigations are essential to maintain successful safety programs. The details and facts are necessary to develop procedure that can control both the conditions, acts, and behaviors that contribute to incidents.

WHEN AND HOW TO REPORT INJURIES / NEAR MISSES

You must promptly report all accidents, occupational injuries / illnesses, and near misses to your supervisor and EHS office.

Supervisors and employees must immediately report any major injury/accident (anything resulting in a hospital visit, amputation, equipment damage, or death).

After reporting to your Supervisor, visit Evergreen's Environmental Safety & Health page to fill out an submit an accident report or a safety hazard.

ACCIDENT SCENE PRESERVATION

In cases of major accidents, the accident scene is to be secured and preserved. If the scene needs to be disturbed in order to move/assist the injured employee that is ok. However, this needs to be noted in the accident investigation. Otherwise, every effort will be made to keep the scene. If the scene needs to be restored in order to maintain essential functions, L&I will be contacted via 1-800-423-7233 by EHS or the Department Manager. The college will request consent to disturb the scene in order to maintain essential functions. If consent is granted photos of the area and applicable measurements will be taken to demonstrate what the scene looked like at the time of the incident.

The EHS office will investigate and document the incident. Only the EHS Manager or Facilities Manager can release the site for return to service.

REPORTING AN ACCIDENT/FATALITY TO L&I

In cases where an accident results in an in-patient hospitalization, amputation, physical loss of an eye, or fatality, it must be reported to The Department of Labor & Industries within 8 hours of Evergreen Management becoming aware of the incident. EHS or the Department Manager will report the incident by calling 1-800-423-7233. Make a note of when you called the accident in and who you talked to or if you left a message. Make sure to provide the following information:

- The name of our establishment (The Evergreen State College)
- Your name and title with Evergreen
- A call back number
- Our address (2700 Evergreen Parkway NW, Olympia)
- Date/time
- Name of injured employee
- Description of accident and when it occurred

EMERGENCY PROCEDURES

Policy Overview

The purpose of The Evergreen State College campus emergency procedures are to ensure that all individuals who use The Evergreen State College campus buildings or campus facilities are able to navigate emergency situations in an effective, timely, and safe manner.

FIRE

Fire alarm

If the fire alarm is activated, immediately exit the building using designated evacuation routes and proceed to the designated evacuation site. Do not use the elevators! Do not re-enter the building unless the fire alarm is turned off or given the ok by on-scene responders. If the fire alarm is sounding, it is not safe to re-enter.

Voice alert

If the voice alert is activated, listen carefully to the message and follow any instructions given. Exit the building using designated evacuation routes and proceed to the designated evacuation site. Do not use the elevators! Do not re-enter the building unless notified by the voice alert system or by on-scene responders.

If trapped

Call police services or 911 if a phone is available. Report your location and situation. Go to a window, if possible, and signal emergency personnel by waving or hanging/taping a large sign. If smoke is present, stay low, cover your face with a cloth (damp if possible), and place fabric, cloth, and/or towels around door cracks to keep smoke out.

Special assistance

College safety policy recommends that people who cannot evacuate using stairs move to an emergency exit and remain at the exit in the stairwell and wait for firefighters or other help to arrive. Depending on the situation, you may choose to wait at an alternative site as long as someone knows where you are.

Providing assistance

If you are willing and able, help anyone in your area who may need assistance.

Fire extinguishers

Fire extinguishers are located in locked boxes and identified on the evacuation diagrams. The boxes have breakaway locks so one must pull hard on the handle to access the fire extinguisher. It is important to remember that these are not meant to be used in a fire evacuation situation but only for small localized fires. Fire extinguisher use is on a voluntary basis. It is highly recommended that in an event of a fire, staff immediately exit the building and do not attempt to fight the fire.

Fire plans:

For specific fire plans please refer to the Evergreen State College Building Evacuation Plan.

EARTHQUAKE

During an earthquake

Drop under a sturdy piece of furniture, cover your face and head with your arms, and hold on until the shaking stops. If you are not near a strong table or desk, sit on the floor near an interior wall and away from windows, fireplaces, appliances, or furniture that could fall over.

Doorways are not necessarily safer than other locations. Avoid being in or under stairwells or near building expansion joints. If you're outside, get to an open area away from trees, posts, and windows.

After the shaking stops

Wait until the shaking stops to exit the building. Remember that an aftershock can occur at any time. Exit the building carefully. Watch out for broken glass, electrical lines, wet floors, and dangling overhead building material. Go to the designated meeting area for your group. Do not re-enter the buildings until approved by the emergency response commander.

Campus specific hazards

Chemical containers may fall and break causing chemical spills. Only trained personnel using self-contained respirators should enter lab areas until chemical spills are assessed.

The central campus has a 2" natural gas line running from the Central Utility Plant to the Lab buildings (Including: Lab I, II, & Annex) and a 1" natural gas line to the Child Care Center. There are above-ground propane tanks at the Longhouse and Motor Pool. Our emergency procedures call for gas to be shut off until we can assess the gas lines.

The campus has underground tunnels that contain steam, electrical, water, chilled water and telecommunication lines. The tunnels are heavily reinforced and are not likely to collapse in the event of an earthquake.

ACTIVE THREAT

In general, how you respond to an active shooter is dictated by the specific circumstances of the situation. If you should find yourself in an active shooter situation, try to remain calm as your actions can influence others. Call 911 or police service as soon as possible and if/when it is safe to do so.

If the shooter is outside the building

·Turn off the lights, lock windows and doors, and close blinds and curtains.
·If possible, get on the floor out of the line of fire.
·Move to a central and secure area if safe and stay until all clear.
·Follow directions of uniformed police.

If the shooter is inside the building

·If safe to exit, flee the area, if unsure do not flee.
·Dial 911 or Police Services to give the location.
·Do not pull the fire alarm.
·If fleeing is not possible, lock doors, get on the floor, and remain silent.
·Barricade the door with something heavy.
·Hide behind something that is bullet retardant.
·Wait for the all-clear and then follow uniformed police directions.

If the shooter comes into the class or office

·Call 911 or Police Services if it is safe to do so.
·Hide behind something that is bullet retardant.
·Fight the shooter, rush with lots of people, throw things, and use improvised weapons to take the shooter to the ground.
·Play dead if you can't run or hide. Wait for help.
·Wait for the all-clear signal and then follow uniformed police directions.

If caught outside in the open

·Hide behind something that is bullet retardant and wait for emergency personnel
·Run if it is safe to do so. Do not run in a straight line. Summon help when you are able to reach a safe spot
·Play dead if you can't run or hide. Wait for help.
·Fight the shooter if you have no other options.

General armed shooter instructions

·When police arrive, put your hands up to show that you are not a threat to them.

PERSONAL PROTECTIVE EQUIPMENT

Policy Overview

The Evergreen State College has developed this personal protective equipment program to protect workers from hazards such as chemicals, electricity, fumes, sharp objects, and noise. Personal protective equipment (usually called PPE) includes items such as goggles, coveralls, gloves, vests, earplugs, respirators, and personal fall-arrest gear. PPE, when used properly, protects against hazards, but does not eliminate them.

TRAINING

Employees required to use personal protective equipment will be trained before they are required to use the PPE. Retraining will be conducted if PPE requirements change and as needed. Employees will be trained on:

·When PPE is necessary
·What PPE is necessary for the specific job duty hazards
·The limitations of the PPE
·How to put on and take off PPE
·Proper care and maintenance of PPE

PPE TYPES

Footwear

Employees must wear protective footwear when working in areas where there is a danger of foot injuries due to falling or rolling objects, or from objects piercing the sole, or where employees' feet are exposed to electrical hazards. Other trades or specific tasks may be assessed by a Supervisor and/or EHS to also require protective footwear. Footwear that has deteriorated to a point where it does not provide the required protection must not be used.

Note that "substantial footwear" is defined as footwear that is made of leather or other equally firm material that meets the requirements of WAC 296-155-212. Traditional tennis shoes, shoes with canvas tops, thin/soft soled athletic shoes, open-toed sandals, slippers, dress shoes, or other similar types of shoes must not be worn.

Eye protection

Appropriate eye protection will be provided to and worn by employees whose job exposes them to eye injury hazard exposures. The minimal acceptable form of eye protection are safety glasses that meet ANSI standard Z87.1-1989.

Each affected employee who wears prescription lenses while engaged in operations that involve eye hazards will wear either prescription safety glasses or eye protection that can be worn over the prescription lenses.

Head protection

Employees will wear a hard hat when working in areas where there is a potential for injury to the head from falling objects or when there is potential for injury to the head where there are low overhead hazards or surfaces.

Gloves
Employees will use appropriate hand protection when they are exposed to hazards such as those from skin absorption of harmful substances, severe cuts/lacerations, severe abrasions, punctures, chemical burns, and/or thermal burns. Gloves will not be worn for tasks where there is a greater hazard of the potential for catching/pulling.

Hearing protection
Hearing protection will be available and worn in areas that have been designated as required due to DBA being that of 85 or greater at any given time. Baseline and annual audiometric testing will be performed for employees who are exposed to time-weighted average exposures that exceed the 85 DBA limit.

High visibility apparel
Anytime employees are working around traffic and/or heavy machinery a high visibility vest, shirt, sweater, or coat will be worn.

WORK ATTIRE

Given the work environment facilities personnel work in, proper base work attire is required.
·**Shirts** – Shirts must have at least a mid-sleeve. No tank tops. If working around moving machinery, long sleeves are not recommended.
·**Pants** – Any time employees are working with or around equipment/tools where there is potential for injury to the lower extremities, sufficient work pants shall be worn.

Other required PPE
Other PPE such as fall protection, respirators, Tyvek suits, face shields, etc. will be made available as needed or required to safely perform job duties as determined by the Supervisor and/or EHS.

SELECTING APPROPRIATE PPE IN ACCORDANCE WITH SAFETY DATA SHEETS

Anytime an employee is participating in a task that requires the direct use of chemicals, the safety data sheet for those specific chemicals will be consulted to determine what PPE is necessary. If the employee and/or Supervisor needs assistance in determining what PPE is required EHS will be contacted.

PPE assessment
The Environmental Safety and Health Office of The Evergreen State College has prepared a job title-specific personal protective equipment assessment. A key element of this assessment includes a thorough hazard assessment of activities, processes, and work areas to determine the nature and degree of hazards, determination of the engineering and administrative controls that are in place, and relevant regulations. If at any time there is an update to the job duties of a particular role, the PPE assessment will be re-evaluated and updated if necessary.

Obtaining PPE
All PPE will be provided to employees at no cost. If an employee is in need of PPE, the Supervisor or EHS Office will be contacted and the employee will be provided with the necessary PPE as soon as possible. If the specific PPE is not available on-site, it will be ordered and provided when available.
Work boot allowance - Evergreen Facilities has a current boot allowance of $150. Employees can either arrange the use of a purchase card or be refunded with a copy of the purchasing receipt.

INSPECTION, MAINTENANCE, & STORAGE

PPE will be inspected for defects before every use. PPE should be clean. If dirty, clean it with soap and warm water. Do not use solvents or abrasives to clean it as this will weaken the structural integrity of the equipment. Store PPE out of sunlight and in an area where it will be protected and kept clean. Replace any defective parts with parts made by the same manufacturer for that equipment. Do not make makeshift repairs. If it cannot be repaired properly, replace it.

ASBESTOS PROGRAM

Policy Overview

Building materials can contain a number of hazardous components that, if disturbed, can pose a health risk to staff and building occupants. Regulated building materials pose no health risk when left alone and intact; however, during maintenance, renovation, or demolition materials that may pose health risks must be managed, abated, and disposed of appropriately according to regulations. Evergreen has adequately trained staff for the purpose of taking asbestos samples to identify contaminated areas. However, Evergreen staff will not be engaged to conduct any asbestos removal. Any removal of asbestos-containing material will be subcontracted out to a certified asbestos abatement contractor.

TRAINING

All staff will be provided with an asbestos awareness training upon new hire. Staff designated to take asbestos samples for the purpose of identifying contaminated areas will be provided with AHERA Building Inspector training for asbestos sampling tasks.

Upon receiving certification, staff will conduct a hands-on process training with a member of the Evergreen Asbestos Sampling Team that will include:

- Removal methods
- Record-keeping procedures
- Labeling procedures
- Paperwork procedures
- PPE and tool use
- How to enter and navigate the asbestos database
- Best practices

REMOVAL WORK

Evergreen staff will not conduct any removal or abatement work for asbestos. Work impacting ACM in pipe lagging, fireproofing, gaskets, mastics, ceilings, electrical systems, roofing material, cement asbestos board, and any other ACM is to be conducted by a certified asbestos contractor and performed by certified asbestos workers per Washington State standards.

MAINTENANCE WORK

Building maintenance that is anticipated to require any form of demolition or work within close proximity of asbestos-containing material in a manner where disturbing the asbestos-containing material is anticipated will require the protection or removal of asbestos-containing material prior to beginning work. Anytime there is maintenance work that disturbs building material an asbestos sample will be taken or a previous good faith survey will be consulted to determine the presence or absence of asbestos.

MINOR ALTERATIONS / INSTALLATIONS

Departments performing or contracting minor installations or alterations, including office furnishings, audio-visual equipment, and other fixtures will work with Facilities to obtain sample testing or an asbestos survey to avoid impacting asbestos-containing material. If asbestos-containing material will be impacted, qualified workers must perform the work.

PROCEDURES

Evaluating damaged or disturbed asbestos-containing material

ACM (also known as asbestos-containing material) may be damaged by wind, vibration, water, or contact through normal building use, renovation, and construction. Asbestos that is damaged or worn to a degree that has the potential to release fibers must be repaired or removed to decrease the potential for exposure. Any time damage or demolition work is identified, the EHS office, Facilities Manager, Construction Services, and one of the designated asbestos sample-taking staff will be notified to assess the structure and determine if the area includes ACM and what the scope of work for abatement will be.

Assessing and closing spaces for occupancy

When ACM or material that is suspected of containing asbestos has been reported as damaged or disturbed, the EHS office along with the Facilities Manager will investigate the area and close the space to occupancy until abatement or encapsulation can occur. Temporary signage indicating that the space is temporarily closed to occupants due to safety issues and how to contact EHS will be posted. The normal lock to the space will be replaced with a safety core lock.

Monitoring for sampling activities

The college has conducted an asbestos exposure assessment for sampling activities and as a result, has found that staff conducting this activity are not subjected to exposure over the PEL (permissible exposure limit). As such, sample collection staff may elect to forgo Tyvek suits and respirators at their discretion (unless the sample is known to be or obviously TSI).

Copies of the exposure assessment can be obtained from the EHS office.

PERSONAL PROTECTIVE EQUIPMENT

If sample collection staff choose to don PPE or the situation requires it, proper personal protective equipment will be worn in the following manner:

Disposable coveralls

- Coveralls should be one size too big to prevent breaking or tearing when worn.
- Arm cuffs should be pulled over the edge of gloves. If the cuffs are loose, seal them with duct tape to prevent fibers from getting in.
- Ensure that coverall legs go over the top of shoe covers.
- After respirator and eyewear are fitted, ensure that the coverall hood goes over respirator straps, arms of safety glasses, and covers all hair.

Footwear

- Shoe covers are worn over shoes and should cover all of the boot/shoe and be secured above the ankle.
- When shoe covers are secured, pull the cuffs of the coverall legs down to cover the top of shoe covers.

Gloves

- Only use disposable latex, nitrile, or neoprene gloves.
- Tuck gloves under the cuffs of coveralls and tape the cuffs if loose.

Respirator

- Respirator should be worn at all times when working with asbestos and suspected asbestos-containing materials.
- Respirator must be decontaminated after each use.
- Ensure mask fits correctly by conducting a fit check
- Close off inlet to filter with hands
- Inhale gently
- Hold for 10 seconds
- Ensure the face piece remains slightly collapsed

Protective eyewear

- Always wear protective eyewear when working with materials that have the ability to be or become airborne.
- After fitting your mask, fit your eyewear and place the coverall hood over the top of the respirator straps and eyewear arms.

Personal Decontamination

- Use wet methods or HEPA vacuum to clean all equipment and tools used.
- Remove any visible asbestos dust from protective clothing by wet wiping with clean, wet wipes and place in asbestos disposal bag.
- Carefully remove shoe covers, gloves, and coveralls using the inside out method and place in asbestos disposal bag.
- Remove respirator last. Remove filter cartridges and place in asbestos disposal bag. Wash the respirator and place it in a proper storage place where it can dry.
- Wash hands, face, and hair thoroughly with soapy water and/or wet wipes.

SAMPLE COLLECTION

To confirm or discount the presence of asbestos, representative bulk samples must be collected. Multi-layered materials, like multiple layers of old tile and linoleum flooring or multiple layers in wall or ceiling materials, will commonly be encountered. Careful consideration must be given to which layers of multi-layered materials to sample. Ideally, a sample should be collected for each suspect layer. The number of representative bulk samples collected should be consistent with recognized industry standards and principles of good occupational hygiene practice.

General procedures

- Before taking the sample, wet the material to be sampled with a fine mist of water.
- Using a clean cutting tool, cut out a small piece of material about 2 square inches or approximately 2 tablespoons worth and put it in the zip lock collection bag. Be sure to penetrate any paint or protective coating and make sure you sample all layers of the material.
- Do not disturb the material any more than what is needed to take a small sample.
- Tightly close the sample bag and wipe the exterior with a wet wipe to remove any material which may have adhered to the bag during sampling.
- Patch the location from which the sample was taken with asbestos-rated adhesive tape.
- Decontaminate (wipe) tools between sample collections and after completing all sample collections.
- Mist plastic sheet on the floor with water, carefully fold it up and dispose of it along with soiled PPE in an asbestos waste bag.
- Label asbestos sample bag(s).

Flooring

The lab needs approximately one to two square inches but it can be a long skinny strip or a perfect square. Make sure to sample from the top down to the substrate. Include any paper backing or mastic (glue).
A sheet vinyl floor generally consists of three layers: The upper vinyl surface, a felt backing, and mastic (glue).
A floor tile is usually two layers, the tile, and the mastic. Sometimes there is leveling compound or a vapor barrier underneath. Those materials are suspect for asbestos as well.

Popcorn Ceiling

A sample needs to be representative of the entire area. If you suspect that there was an addition to the space and that the popcorn ceiling in one area may have been applied at a different time than the other, then sample from each location. It is also best practice to submit at least two samples from the same ceiling.

Vermiculite Insulation

Most labs only require at least one good cup in order to make a qualitative determination as to the presence or absence of asbestos. Invert the plastic zip lock bag over your hand and sample from the top of the material, where grains are more coarse, down through to the bottom of the material, where grains are finer. Often the asbestos occurs as smaller, heavier grains that settle to the bottom of the attic floor or wall cavity. Grab around the material, pull the bag around it, and seal.

Wallboard and Plaster

For wall and ceiling systems, make sure to sample through the material so that an identifiable cross-section is collected. For example, a cross-section of a wallboard might have a painted texture surface followed by layers of tape, joint compound, brown paper wrap, and a white chalky sheet of gypsum. Sampling from an inside corner where two pieces of drywall are seamed with mud and tape is recommended.

SAMPLE QUANTITY

According to EPA sampling guidelines, use the 3-5-7 rule when taking surfacing material samples such as popcorn ceiling texture or wall surfacing texture:

·3 samples from less than 1,000 square feet
·5 samples from 1,000 – 5,000 square feet
·7 samples from greater than 5,000 square feet

For thermal system materials such as insulation, 3 samples should be taken for each kind of material.
For miscellaneous materials such as window putty, roofing tile, etc. at least one sample should be taken from each homogeneous material.

DISPOSAL OF CONTAMINATED ITEMS

·Carefully place contaminated items in the designed asbestos waste bag.
·Plastic bags containing contaminated items should not be more than half full to prevent breaking.
· Twist the neck, fold the twisted neck over, and tape the folded neck with duct tape to create an airtight seal (use HEPA vacuum if available, to collapse the bag). Label bag DANGER ASBESTOS WASTE.
·Place each sealed bag inside a second plastic bag labeled DANGER ASBESTOS WASTE along with the date and correlating sample numbers. Seal the outer bag in the same manner as you did with the first bag. This is called double bagging.
·If the material tested came back positive, bag contaminated items and leave them in space for the vendor to dispose of.
·For all other waste, contact EHS office for pick up and disposal.

CONTAINING ASBESTOS-POSITIVE AREAS

Asbestos only poses a threat to health and safety when it is disturbed and has the potential to become airborne. As such, when an area highly suspected or known to contain asbestos has the potential to become further disturbed the following procedures will be implemented in anticipation of abatement by a certified abatement contractor.

·If the area is able to be contained and locked (such as a room), an EHS core lock will be applied to the space and an asbestos notification sign will be placed on the door.
·If the area is unable to be contained or locked out (areas such as a hallway) cardboard will be applied and taped down with asbestos-rated tape. The area will then be danger taped off as feasible for the location and an asbestos warning sign placed in the vicinity.
·Insulation – apply asbestos-rated tape to the exposed area where the sample was taken and place asbestos warning sign in the area. If feasible, efforts will be made to keep personnel out of this area.

MEDICAL SURVEILLANCE

All employees who are AHERA Building Inspector training for asbestos sampling will receive an initial medical examination by a physician before engaging in sampling work. Periodic medical examinations will be conducted annually thereafter.

RECORD KEEPING

Facilities and the EHS office will retain inspection, sampling, and abatement records so that the records are available for reference for future maintenance, alteration, and construction work, hazard evaluation, and other business needs.

All departments with sampling staff will provide inspection, sampling, and other pertinent records to the EHS office so that the records are available for reference for future maintenance, alteration/construction work, hazard evaluation, and other business needs.

Employee exposure and area air monitoring data will be retained for the minimum required time of employment duration, plus 30 years. Training records will be retained for at least three years past the end of employment.

CAMPUS ASBESTOS DATABASE

The college will maintain an asbestos sampling database that documents the results of asbestos sampling across campus. Information will include:

·Sample area location/description
·Sample notes
·Test result (hot/negative)
·Action (was asbestos removed)
·Work order number

The EHS office and the College's certified asbestos samplers are responsible for updating and maintaining the database.

POSSIBLE ASBESTOS-CONTAINING MATERIALS ON CAMPUS

This list is not all-inclusive, as asbestos was used in a multitude of building products. It does provide examples of the types of products that may contain asbestos. Any possible asbestos-containing material needs to be sampled by an asbestos sampler before the material is disturbed.

- Cement Pipes
- Cement Wallboard
- Cement Siding
- Asphalt Floor Tile
- Vinyl Floor Tile
- Vinyl Sheet Flooring
- Flooring Backing
- Construction Mastics (floor tile, carpet, ceiling tile etc.)
- Acoustical Plaster
- Decorative Plaster
- Textured Paints/Coatings
- Ceiling Tiles and Lay-in Panels
- Spray-Applied Insulation
- Blown-in Insulation
- Taping Compounds (thermal)
- Electric Wiring Insulation
- Laboratory Hoods/Table Tops
- Laboratory Gloves
- Fire Blankets
- Fire Curtains
- Elevator Equipment Panels
- Caulking/Putties
- Adhesives
- Heating and Electrical Ducts
- Joint Compounds
- Spackling Compounds
- Roofing Shingles Roofing Material
- Base Flashing
- Fire Doors
- Electrical Panels
- Packing Materials (for wall/floor penetrations)
- Chalkboards
- Elevator Brake Shoes and Doors
- HVAC Duct Insulation
- Boiler Insulation
- Breaching Insulation
- Ductwork Flexible Fabric Connections
- Cooling Towers
- Pipe Insulation (corrugated, air-cell, block etc.)
- Wallboard
- Vinyl Wall Coverings
- High Temperature Gaskets
- Roofing Felt
- Thermal Paper Products
- Electrical Cloth
- Fireproofing Materials

BLOODBORNE PATHOGEN PROGRAM

Policy Overview

The Evergreen State College is committed to providing a safe and healthful work environment for our staff. This includes potential exposure to bloodborne pathogens. The following plan outlines actions the campus and staff will take to eliminate or minimize occupational exposure to bloodborne pathogens and other potentially infectious material (OPIM).

TRAINING

Employees who have the potential to be exposed to bloodborne pathogens will be provided with training to ensure that they are knowledgeable of the hazards associated with bloodborne pathogens and the procedures to protect themselves. Training will be provided before any task is assigned where occupational exposure might occur and annually thereafter.

Training will address the following:

- Providing accessible copies of the Washington Administrative Code standard for Bloodborne Pathogens (WAC 296-823).
- A general explanation of the epidemiology and symptoms of bloodborne diseases.
- An explanation of how bloodborne pathogens are transmitted.
- Review of the College's exposure control plan and how employees can obtain a copy.
- How to recognize tasks and other activities that could involve exposure to blood and other potentially infectious material.
- The use and limitations of methods to reduce exposure, including: equipment, medical devices, work practices, and personal protective equipment.
- Information regarding the use of personal protective equipment, including: the types, proper selection, proper use, limitations, storage location, putting it on & taking it off, handling, decontamination, and disposal.
- Information about the hepatitis B vaccine, including: effectiveness, benefits, safety, method of administration, and provision of no cost to employees.
- What actions to take and persons to contact when exposed to blood and other potentially infectious material occurs outside of the normal scope of work.
- An explanation of the procedure to follow if an exposure incident occurs, including: the method of reporting the incident, and the medical evaluation and follow-up that will be available.
- Information about the post-exposure evaluation and follow-up procedure.
- Explanation of the signs and labeling or color-coding as required per the WAC.
- All training must provide an opportunity for interactive questions and answers with the training at the time of the training.

RECORD KEEPING

Training

Records and documentation of bloodborne pathogen training will be kept on file for 3 years from the date of the training by the Department Supervisor and EHS Safety Manager. These records will be kept on file and available for review by employees and employee representatives within 15 working days of request. Training documentation will notate the following:

·Dates of training
·Contents of training
·Name and Qualification of instructor
·Name and job title of training attendants

Medical records

Medical records related to worker's compensation claims and/or exposure incidents will be held by the employee's health care/occupational health provider.

The EHS Safety Manager is responsible for the maintenance of the required worker compensation records. Any medical records that come to The Evergreen State College regarding a claim or incident will be held by Human Resources in an employee medical file that is separate from the employee's personnel records. Employee medical records will be provided upon request of the employee or to anyone having written consent of the employee within 15 working days. Such requests should be sent to the employee's health care provider or, if appropriate, the Human Resources office.

Sharps injury log

All needlestick injuries from contaminated sharps will also be recorded in the Sharps Injury Log and reported to the Department Supervisor using the OSHA 301 form. Incident reports must include the following:

·Date of injury
·The type and brand of penetration object involved
·The department of the work area where the incident occurred
·An explanation of how the incident occurred

REQUIRED PPE

GLOVES – Gloves will be worn when administering first aid where it is reasonably anticipated that the first aid responder may have contact with blood or other potentially infectious material and when cleaning up material that has the potential to be contaminated with blood or other potentially infectious material. Single-use gloves will be replaced as soon as possible if they are torn, punctured, or when their ability to function as a barrier is compromised. Alternative hypoallergenic gloves will be available for employees with allergies to latex gloves.

SAFETY GLASSES-Safety Glasses are to be worn during CPR whenever splashes, spray, spatter, or droplets of blood or other potentially infectious material may be generated or when cleaning up material that has the potential to be contaminated with blood or other potentially infectious material and eye contamination is reasonably anticipated.

CPR MASK – Current guidelines do not recommend mouth-to-mouth resuscitation for CPR. However, if an employee conducting first aid chooses to conduct mouth-to-mouth resuscitation, then a CPR mask must be utilized.

DISPOSAL OF CONTAMINATED ITEMS

All visibly contaminated or potentially contaminated items such as gloves, gauze, and bandages will be placed and disposed of in leakproof bags that are marked with a red biohazard label and the biohazard symbol in a contrasting color. All contaminated sharps will be disposed of in leakproof, puncture-resistant containers that are marked with a red biohazard label and the biohazard symbol in a contrasting color. Contact Environmental
Health and Safety (360) 791-2646 for instructions on disposing of a biohazard bag. Do not dispose of contaminated or potentially contaminated items or biohazard bags in regular waste receptacles.

Bloodborne Pathogen Exposure Control Plan

Identification of employees who are at risk for exposure

The following are job classifications on campus in which all employees have occupational exposure to bloodborne pathogens:

	JOB TITLE	LOCATION
1	Custodial Services	Building Services / RAD
2	Plumbing	CUP/Shops/RAD
3	Grounds Specialist	Grounds
4	Waste Collector	Grounds

CONTACT NAMES & PHONE NUMBERS

EHS SAFETY MANAGER - (360) 791-2646
FACILITIES MANAGER – (360) 867-6586

The EHS Office is responsible for implementing the exposure control plan.
The EHS Office will maintain, review, and update the exposure control plan at least annually, and whenever necessary to include new or modified tasks and procedures.
The EHS Office will make this plan available to employees and DOSH representatives.
The EHS Office will be responsible for making sure all medical actions required are performed, and that appropriate employee medical records are maintained.
The EHS Office will make sure this list is kept up to date.

Universal precautions

All employees will utilize universal precautions which means that all blood and other potentially infectious materials will be treated as if they contain bloodborne pathogens.

Exposure control plan

Employees covered by the bloodborne pathogens standard will receive an explanation of the exposure control plan during their initial training session. It will also be reviewed in their annual refresher training. All employees have an opportunity to review this plan at any time during their work shifts by contacting their Supervisor. If requested, EHS will provide an employee with a copy of the emergency control plan free of charge and within 15 days of the request. The EHS office is responsible for reviewing and updating the exposure control plan annually or more frequently if necessary to reflect any new or modified tasks and procedures, which may impact occupational exposure and to reflect new or revised employee positions with occupational exposure.

ENGINEERING CONTROLS AND WORK PRACTICES

Engineering controls and work practice controls will be used to prevent or minimize exposure to bloodborne pathogens. The specific engineering controls and work practice controls used are listed below:

- Staff will don full PPE to include: latex gloves and safety glasses
- Grabber tool will be utilized to pick up needles
- Needles will be disposed of in a dedicated sharps container

The campus identifies the need for changes in engineering control and work practices through:

- Review of Quality Improvement/Quality Assurance (QI/QA) issues at each safety committee meeting by including it as a standing item on the agenda.
- Feedback from the EHS Manager.
- Feedback from staff during weekly safety meetings.
- Observation and awareness of good work practices by co-workers and supervisors.

New procedures or new products will regularly be evaluated by:

- Washington State Department of Labor and Industries via consultation
- Quarterly communication with the EHS Manager
- Regular monitoring of the COM-DIS list service for communicable disease issues, a national student health service list service, the immunization action coalition list service, and the hepatitis B alert list service.

Both staff and management officials are involved in the process of eliciting comments from frontline staff by including quality improvement and quality assurance as a standing agenda item at safety meetings.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

PPE is provided to employees at no cost to them. The work unit Supervisor will provide or facilitate training in the use of the appropriate PPE for the tasks and procedures employees will perform. The EHS office may provide training as needed.

The types of PPE available to employees are as follows:

- Gloves
- Surgical masks, face shields, N95 respirators, CPR masks with one-way valve
- Disposable Gowns and aprons
- Eye protection

Employees will be oriented on the types of PPE available and their location in the facility during training and when changes occur.

All employees using PPE will observe the following precautions:

- Wash hands immediately or as soon as feasible after removal of gloves or other PPE.
- Remove PPE after it becomes contaminated, and before leaving the work area.
- Used PPE may be disposed of in the appropriate trash container if disposable and not contaminated with blood.
- Wear appropriate gloves when it can be reasonably anticipated that there may be hand contact with blood or other potentially infectious materials, and when handling or touching contaminated items or surfaces. Replace gloves if torn, punctured, contaminated, or if their ability to function as a barrier is compromised.
- Utility gloves may be decontaminated for reuse if their integrity is not compromised. Discard utility gloves if they show signs of cracking, peeling, tearing, puncturing, or deterioration.
- Never wash or decontaminate disposable gloves for reuse.

- Wear appropriate face and eye protection when splashes, sprays, spatters, or droplets of blood or other potentially infectious materials pose a hazard to the eye, nose, or mouth.
- Remove immediately or as soon as feasible any garment contaminated by blood or other potentially infectious materials in such a way as to avoid contact with the outer surface.

HANDLING USED PPE

- Any used PPE (including face shields) that are used in a clean-up operation with the potential of exposure to bloodborne pathogens or that has come in contact with blood or other potentially infectious materials must be disposed of in a biohazard waste bag and stored in the designated hazardous waste area.

HOUSEKEEPING

Regulated waste will be placed in containers that are closable, constructed to contain all contents, prevent leakage. Waste will be appropriately labeled or color-coded and closed prior to removal to prevent spillage or protrusion of contents during handling.

HANDLING SHARPS CONTAINERS

When the sharps disposal container is three-quarters full, the top will be closed securely and the container will be placed in the biohazard collection container in the designated area for pick up on the next scheduled date.

Other regulated waste

All other regulated waste is bagged at the end of each shift and placed in the biohazard collection container in the hazardous waste station for pick up on the next scheduled date.

BROKEN GLASS, UNKNOWN SOURCED NEEDLES, OR OTHER SHARPS

Broken glassware, unknown sourced needles, or other sharps that may be contaminated are picked up using mechanical means such as a brush/dustpan or picker

Contaminated sharps

Contaminated sharps are discarded immediately or as soon as possible in containers that are closable, puncture-resistant, leak proof on the sides and bottoms, and labeled or color-coded appropriately. Sharps disposal containers are available at the shop and EHS office. All containers will be easily accessible and as close as feasible to the immediate area where sharps are used.

CLEANING UP BLOOD AND OTHER POTENTIALLY INFECTIOUS MATERIAL

For liquid contaminates - sprinkle absorbent onto the area and then pour disinfectant directly onto the material to disinfect. Leave disinfectant on the material for 10-30 minutes. Sweep up absorbent material and place it into a haz-waste bag. Pour disinfection on the area of the spill to complete disinfection and wipe up with paper towels. Place paper towels in the haz-waste bag. Place used disposable PPE in haz-waste bag. Transport haz-waste bag to designated holding area.

For dried body fluids – Pour disinfectant onto the dried body of the spill and leave on for 10-30 minutes. Sprinkle on absorbent. Sweep up absorbent material and place into haz-waste bag. After the absorbent is swept up, put disinfectant on the area to complete disinfection and wipe up with paper towels. Place paper towels in haz-waste bag. Place used disposable PPE in haz-waste bag. Transport haz-waste bag to designated holding area.

For needles / sharps – Use grabber tool to pick up needle. Place needle in sharps container.

LABELS

The Department Supervisor will ensure warning labels are affixed or red bags are used as required if regulated waste or contaminated equipment is brought into or generated by the facility. Employees will notify the Department Supervisor if they discover regulated waste containers, refrigerators containing blood or other potentially infectious material, contaminated equipment, ect without proper labels.

Equipment, Environments, and Work Surfaces

Contaminated work surfaces will be cleaned with an appropriate disinfectant:
·After completion of initial clean up.
·Immediately or as soon as feasible when surfaces are clearly contaminated or after any spill of blood or other potentially infectious material.

Spills of blood should be decontaminated with freshly diluted (1:10) bleach, or with an EPA approved disinfectant. Appropriate PPE should be worn if necessary to protect clothing and employee during cleaning and decontamination procedures. Cover spill with paper towels or other absorbent material and flood with diluted bleach solution. Let stand for at least 10 minutes. Clean up with more paper towels. Dispose of as infectious waste.

Broken glassware, unknown sourced needles, and other sharps which may be contaminated should not be picked up directly with hands. It must be soaked with disinfectant and then cleaned up using mechanical means such as a brush/dustpan, tongs, or pickers.

HEPATITIS B IMMUNIZATION

The EHS Manager will provide or facilitate training to employees on hepatitis B immunization. Training will address: the safety, benefits, efficacy, methods of administration, and availability.
The hepatitis B immunization series is available at no cost to employees within 10 days of initial assignment to employees identified in the exposure determination section of this plan.
Immunization is encouraged unless:
·Documentation exists that the employee has previously received the series
·Antibody testing reveals that the employee is immune, or
·Medical evaluation shows that immunizations contraindicated
However, if an employee chooses to decline immunization, the employee must sign an immunization declination form. Employees who decline may request and obtain immunization at a later date at no cost. Documentation of refusal of the immunization is obtained during the annual training kept in the employee's file.

POST-EXPOSURE EVALUATION AND FOLLOW UP

Should an exposure incident occur, employees will contact their supervisor. Immediately a confidential medical evaluation and follow-up will be conducted at the time of exposure. Following the initial first aid, the following activities will be performed:

- Document the routes of exposure and how the exposure occurred on the accident report form.
- Identify and document the source individual (unless the identification of the said individual is infeasible or prohibited by law).
- Employee will be referred to an occupational health provider for the appropriate workup.
- If possible arrangements will be made to have the source individual tested as soon as possible to determine HIV, HVC, and HBV infectivity. It will be documented that the source individual's test results were conveyed to the employee's healthcare provider. If the source individual is already known to be HIV, HCV, and/or HBV positive and documentation is available, new testing is not required.
- Assure that the exposed employee is provided with the source individual's test results and with information about applicable disclosure laws and regulations concerning the identity and infectious status of the source individual.

ADMINISTRATION OF POST-EXPOSURE EVALUATION AND FOLLOW UP

The healthcare professional evaluating an employee after an exposure incident should receive the following as requested:

- A description of the employee's job duties relevant to the exposure incident
- Route(s) of exposure
- Circumstances of exposure
- Results of the source individuals test results (if available)
- Relevant employee medical records (including vaccination status)

The EHS Manager will also provide the employee with a copy of the evaluating healthcare professional's written opinion related to a worker's compensation claim within 15 days of completing the evaluation.

INCIDENT INVESTIGATION

The Department Supervisor and EHS Manager will review the circumstances of all exposure incidents to determine:

- Engineering controls in use at the time
- Work practices followed
- Description of the device being used
- Protective equipment or clothing that was used at the time of the exposure incident
- Location of the incident
- Task being performed when the incident occurred
- Employee's training
- Recommendations related to a need for procedural improvements

The Evergreen State College

Hepatitis-B Vaccination Form

Check one of the options below

Sign and return to Environmental Health and Safety, Lab II 1264

☐ **Hepatitis B Vaccination Acceptance**

I have received training on blood borne pathogens and I understand that I may have occupational exposure to blood and other infectious materials which may place me at risk of acquiring Hepatitis B virus infection. I wish to receive the hepatitis B vaccination series and costs will be paid for by the college.

☐ **Hepatitis B Vaccination Declination**

I have received training on blood borne pathogens and I understand that due to my potential occupational exposure to blood or other infectious materials I may be at risk of acquiring hepatitis B virus (HBV) infection. I have been given the opportunity to be vaccinated with hepatitis B vaccine, at no charge to myself. However, I decline hepatitis B vaccination at this time. I understand that by declining this vaccine, I continue to be at risk of acquiring hepatitis B, a serious disease. If in the future I continue to have occupational exposure to blood or other potentially infectious materials and I want to be vaccinated with hepatitis B vaccine, I can receive the vaccination series at no charge to me.

Print Name:

Signature:

Date:

the evergreen state college

SHARPS LOG

Facility/Location: _____ Year: _____

Address: _____

1910.1030 Bloodborne Pathogens standard states that the employer shall establish and maintain a Sharps Injury Log for the recording of percutaneous injuries from contaminated sharps. The information in the Sharps Injury Log shall be recorded and maintained in such manner as to protect the confidentiality of the injured worker.

Date/Time	Type, Brand, Model, of Device	Department or Work Area	Describe How the Incident Occurred

SECURING & CLEANING UP BROKEN GLASS

Windows

Assess the damage

Before addressing the broken glass of the window, conduct a job hazard analysis to ensure that you have the proper PPE, tools, and process to continue safely.

Personal Protective Equipment

Before you start the task of cleaning up the broken glass, make sure you are wearing:

- Pants
- Work boots
- Leather work gloves
- Safety glasses

Partially broken or cracked windows

If the window is only cracked or broken pieces are still intact, examine the frame surrounding it and see if the glass is relatively secure for now.

Totally broken or shattered windows

While securing larger pieces of glass is the main job when the window in question is only partially broken or cracked, a shattered window that has been completely broken is about carefully determining how far the glass went so you can thoroughly map your clean-up. Glass doesn't just fall into the floor when it shatters in a window. Make sure you're checking all the nearby furnishings for glass shards, too.

Securing the window

If the window glass is secure but cracked, put painter's tape over the crack. Cover the open window with plywood or plastic tarping.

Fluorescent Bulbs

General Procedure

- Do not vacuum or sweep
- Do not touch with bare hands
- Open windows to vent vapors for at least 15 minutes and exit the space
- Use stiff paper or cardboard to pick up large pieces
- Use duct tape to pick up small pieces and powder
- Wipe the area clean with a damp paper towel or wet wipe.
- Place all material in a sealable spill kit bucket
- Coordinate waste pick up with EHS

CHAINSAW & TREE WORK PROGRAM

Policy Overview

The objective of this policy is to reduce the risk of injury or fatality from the use of chain saws for felling, cutting, or trimming trees or wood by Evergreen employees.

TRAINING

All employees who use or have the potential to use a chainsaw will be trained in chainsaw use prior to initial assignment, when assigned to a new tree-cutting task, using new equipment, or when an employee demonstrated unsafe job performance.
New employees will work under the close supervision of a competent person until they demonstrate the ability to perform the job safely.

Employees will be trained on:

- General recognition and prevention of safety hazards in tree work.
- Recognition of hazards, and protective measures which apply to their individual jobs.
- Safe performance of assigned tasks including, but not limited to, personal protective equipment, hand and audible signals, and overhead electrical hazards.
- Safe use and maintenance of the tools or equipment they may be required to use. They must also be trained to understand and follow the manufacturer's instructions.

PERSONAL PROTECTIVE EQUIPMENT

For all chainsaw operations, employees are required to use the following:

- Chaps
- Head protection
- Hearing protection
- Eye protection
- Cut-resistant work boots

OPERATING PROCEDURES

Work in a pair – All Evergreen employees are required to have a second person on-site with means of communication while conducting chainsaw work.
Fueling - Fuel saw outdoors only. Always shut off the engine and allow it to cool before fueling. Wipe up any spilled fuel and check for leaks, especially around the cap.

Starting a saw – Employees will not drop start a saw. Engage the chain brake. Place the saw on the ground where good balance and secure footing can be achieved. Make sure the chain itself is off the ground and not touching anything. Grip the front handlebar firmly and press down. If the saw has a rear handle that is level with the ground, place toe of foot into the hand and place weight on foot. Turn the ignition on. Pull starter rope until resistance is felt and then give a short strong pull until the saw starts.

Hand placement – Make sure to have both hands on the saw at all times to maintain control.

FELLING TREES

Evergreen employees may cut down low-risk trees and have a low potential to result in injury and/or damage to property. Anything deemed to be high risk will be subcontracted out.

Before falling or bucking, conditions such as, but not limited to, snow and ice accumulation, wind speed, the lean of a tree, dead limbs, and the location of other trees, must be evaluated by the cutter, and precautions taken so a hazard is not created for staff involved.

Each danger tree must be checked for signs of loose bark, branches, and other damage that may create a hazard for staff and it must be removed or held in place before falling or removing the tree. When a danger tree has elevated loose bark or branches that cannot be removed, the buddy system must be used to watch for and give warning of falling debris hazards.

Employees must conduct an assessment with either the Department Supervisor or EHS Manager before work commences to determine that the tree is not classified as high risk.

Things to be considered when assessing the tree are:

- Rot or defect in the tree
- Tree lean
- Wind direction
- Limb weight
- Surrounding terrain
- Other trees
- Electrical lines

Clear the area - Set up barricades or safety monitors to keep people out of the danger zone. Ensure that additional employee is at least 2 tree lengths away from the tree being cut and/or under the branch canopy. Plan an escape route – Plan a safe unobstructed path of retreat before making a cut. The path should be at approximately a 45-degree angle away from the line of fall. Remove branches and debris that might be a trip or fall hazard when retreating from the falling tree.

BUCKING DOWNED TREES

There are no restrictions on bucking trees that are already on the ground. However, employees must ensure that the workspace is safe and that there are no other trees in the area that pose a hazard. Employees must also follow all safety guidelines as outlined in this program.

Ensure the tree is stable – Be sure that the fallen tree is stable and will not move as you work. Examine the situation at every limb to be removed. Be certain that the limb will not bind against the saw. Cut on the opposite side of the tree trunk whenever possible, this keeps the trunk between you and the saw. Never make cuts with the saw between your legs, always cut with the saw to the outside of your legs. Don't stand on a log and saw between your feet.

Never cut above shoulder height – Ensure that you cut in a down position.

Positioning – Never stand on the downhill side when removing limbs. Always keep in mind that the tree trunk may roll as limbs are removed. Watch for limbs that may spring out when they are cut due to the released tension.

Always stand to one side of the limb you are to cut. Never straddle it.

PREVENTING KICKBACK

Kickback of a chainsaw is when the teeth on the chain catch on something as they rotate around the tip of the blade. The teeth may have enough force to cause the blade to kick back violently toward you. There are three primary situations that can cause kickback:

- When the nose of the blade strikes another object
- Starting a bore cut improperly
- When the blade nose or tip catches the bottom side of s saw cut during reinsertion.

AVOIDING KICKBACK

- Some kickback control can be maintained by keeping a firm hold on the saw and using a saw which has a chain-break or kickback guard.
- Be alert for blade pinching situations and cut branches at the base of the blade, don't saw with the tip of the blade.
- Use a high chain speed when reinserting the blade in a cut or removing it from a cut.
- Keep the saw teeth sharp so they will cut, dull teeth are more likely to cause a kickback.
- Always cut below shoulder height, otherwise the saw is difficult to control and is too close to your face.
- Helpers should never work so close to the chainsaw operator that they may be struck by the saw if it kicks back, or by a limb which may spring due to the stress.

EMERGENCY TREE WORK

In the cases of wind storms or other weather related incidents, there may be times when employees have to clear trees from the road. In these situations employees will ensure the following:

1.Tree work will not commence in weather situations that put staff conducting tree work in danger such as winds over 25 mph and/or snow accumulation that poses overhead falling/struck by hazards.

2.If the tree has fallen into the road, no removal work will take place until the road has been blocked off and/or Police Services is on site to control traffic.

3.If working in hours of darkness employees will wear high visibility vests/coats.

FIRST AID

Both employees involved with the tree cutting task will be trained in first aid and a first aid kit will be available on site. In the event of a cut related injury 911 will be called immediately and first aid applied. When able, the Department Supervisor and EHS Manager will be notified.

WOOD CHIPPER

Personal Protective Equipment

The following PPE is required when operating or working in the vicinity of a wood chipper:

- **Close-fitting clothes and no jewelry** -

Loose shirt sleeves, pant legs, or jewelry can catch in the equipment's moving parts, resulting in injury. Do not wear gloves with loose cuffs. Pull back long hair.

- **Long pants and work boots**-

Wear long pants without cuffs, to protect your legs from objects that could be thrown from the chipper. Work boots will help you keep a firm footing on the ground and reduce the risk of slipping and falling into the chipper.

- **Safety glasses -**

Safety glasses can protect your eyes from material that may be kicked out of the machine.

- **Hard hat** -

Wear a hard hat to protect your head from material that may be kicked out of the machine.

- **Hearing protection** -

Over time, you can lose your hearing if you are exposed to loud noises without protection. Two common types of hearing protection are muffs and plugs. Ear muffs should seal around your ears to properly muffle loud noises. Discard disposable earplugs after each use.

- **High visibility garments** -

If working by a roadway, employees should wear high-visibility clothing.

Essential personnel for chipper operation

Chipper operation will consist of a mandatory minimum of two staff. It's recommended that both staff be first aid certified and have a first aid kit in the work vehicle.

Role of helper:

The helper will be responsible for being in the close vicinity of the emergency stop and knowing how to operate the emergency stop. The helper will also keep unauthorized personnel out of the work area.

Preparation for Safe Operation

Pre-start inspection

Use the inspection checklist and thoroughly inspect the chipper before beginning work each shift. Cease use and notify your supervisors if any issues are noted.

Missing or damaged guards

Guards and shields protect you from moving parts. Never remove or operate a chipper that is missing it's guard(s).

Chipper hood

Ensure that the hood enclosing the chipper's knives is closed and latched before operating. Check for loose or missing pins in the hood latch as well as cracked or worn hinges. If the hood is not properly secured, it could fly off and seriously injure or kill. The chipper should never be operated with the hood open.

Cutting chamber

Ensure the cutting chamber is free of foreign objects or other debris such as accumulated wood. Wood and foreign object can be thrown from the chipper at high rates of speed.

Fluid Leaks

Fluid leaks can cause fires and breakdowns.

Power take-off (PTO)

Check to make sure the PTO shaft is fitted correctly with a suitable guard. Also, check the operator's manual to ensure that the PTO speed is suitable for the machine.

Machine placement

Place the machine on a level surface that is not concrete, paved, or gravel. Operating on these surfaces can cause thrown material to ricochet and injure or kill the operator or bystanders. Keep other workers from falling into the chipper by ensuring the location of the machine is not directly in front or below where other employees are working.

If the chipper is operated near a roadway, make sure it is positioned far enough away to not interfere with the flow of traffic or injure passersby. Use road work ahead and warning signs to alert motorists that there are employees working in the area. Ensure the discharge chute is pointed away from the roadway as well. This will keep debris from flying toward traffic.

TRANSPORTATION & TRAFFIC

Never move, load, or transport a chipper while the engine is running. Shut off the power supply, and wait for all moving parts to come to a complete stop.

When towing, be sure to connect safety hitch chains and tighten and secure trailer hitch bolts. Rotate the chipper's discharge chit in a direction where it will not strike objects along the roadway. Equipment should only be towed at the manufacturer's recommended speed.

SAFE OPERATION

Safe feeding procedures

- Feed material only when the chipper is at full operating speed.
- Feed branches from the side of the chute, not in front of it. This will reduce the risk of you being caught and dragged into the machine. Standing to the side of the equipment will also make it easier for you to reach the emergency shut off switch in the event of an accident.
- Keep hands and feet outside of the feed chute.
- Use a push stick to help feed small pieces and brush through the chipper to keep you at a distance from the machine's moving parts. Do not push material into the chute with your hands, feet, pitch forks, shovels, ect.
- Let go of material as soon as it begins to be pulled into the machine and walk away to avoid being hit or dragged into the chipper by limbs you are feeding.
- Feed the branches butt end first to keep the chipper from being jammed and to reduce the kickback of material.
- Lay shorter pieces of material on top of longer pieces and feed through the machine.

CONFINED SPACE ENTRY PROGRAM

Policy Overview

This policy is written in accordance with the Washington Industrial Safety and Health Act (WISHA) Permit-Required Confined Space (PRCS) Standard and is designed to enable employees of The Evergreen State College to recognize specific hazards and to establish procedures that are to be followed prior to employee entry into confined spaces or PRCS's.

Each employee whose job assignments may involve entry into PRCS's are covered by this policy. While this policy has identified the appropriate actions to protect affected employees, some situations may have been missed. It is the responsibility of the employee to bring any insufficiencies of this policy to the attention of their supervisor. Any employee that has not received PRCS training shall not be assigned or allowed to enter PRCS.

It is the responsibility of each affected employee's supervisor to ensure their employees adhere to the instructions and procedures of this policy. It is also the responsibility of each employee covered by this section to bring to his or her supervisor's attention any unsafe or hazardous conditions or practices that may cause injury to either themselves or any other employees.

The Evergreen State College employees who are covered by this policy and are required to act in the capacity of an entrant, attendant, or supervisor during confined space entry will receive annual re-training in order to maintain proficiency of this subject.

Identification of Confined Spaces

All known confined spaces on campus have been identified and labeled. If an employee encounters what they believe to be a confined space that is not labeled, the employee should refrain from entering the space and contact their supervisor immediately for assessment and labeling.

The college has compiled a comprehensive confined space identification program that includes photo identification of the space, space location, and identification of permit and non-permit-required spaces. If employees would like to review this document it can be accessed on the facilities drive or a request can be made to the EHS Safety Manager.

Potential Hazards Inside of Permit Required Confined Spaces

Existing Hazards

Because of the hazards that exist in permit-required confined spaces, there are conditions that must be eliminated before entry such as:

·Locking out energy sources (pneumatic, electric, hydraulic, stored energy)
·Atmospheric hazards (too much/little oxygen, hazardous vapors/gases, flammable atmosphere etc)
·Engulfment hazard (water)

Introducing Hazards

The entry Supervisor shall take into consideration the use of chemicals, paint, grinding, or hot work that can create atmospheric hazards and noted on the entry permit.

If hot work is to take place in a confined space, a hot work permit will be filled out and it will be noted on the entry permit.

AIR MONITORING

Air monitoring will be conducted before and during entrance of the space.
The space to be entered will be monitored in levels since gases may settle into layers (top, mid-level, and bottom) with each level being monitored for at least one minute.
Continuous monitoring is required with readings taken approximately every 15 minutes.
In spaces that have been identified to have potential atmospheric hazards (even if eliminated), entrants will wear an air monitor 100% of the time they are in the confined space and will exit immediately if the monitor alarms.

VENTILATION

Once a confined space has been determined to contain or potentially contain a hazardous atmosphere, steps must be taken to ventilate the space before employees are allowed to enter. Ventilation can be accomplished by mechanical means for the general purpose of controlling atmospheric contaminants, prevention of fire/explosion hazards, and/or control of heat and humidity.

- Mechanical ventilation shall be used to purge any permit-required confined space and shall continue throughout entry activities. Atmospheric testing shall be conducted following purging, prior to entry.
- Although the time required to purge the space will depend on the volume of the permit space and the air volume capacity of the blower, permit spaces will be purged at a minimum of 15 minutes prior to entry.
- Ventilation equipment shall be set up such that it blows air into the space rather than exhausting air from the enclosure.
- Locate blowers so that there are no unnecessary bends in the hose (one 90-degree bend reduces the blower capacity to 50%). For continuous ventilation with workers in vault access, a blower of at least 500 cfm will be used.
- The air should enter the space in the vicinity of where the workers will be in the space. It is most efficient to blow air into the confined space by placing the end of the blower hose approximately 1/4th of the height above the floor.
- Blowers will be located outside the space so that they will not pick up exhaust gases from vehicles, heaters, furnaces, etc. The blowers will be operated for one minute prior to placing them in the space.

IMPORTANT BLOWING CONSIDERATIONS

- Test the confined space atmosphere to determine the initial atmospheric conditions.
- The effective blower capacity is affected by the number of bends and the length of the hose. As the length of the hose and the number of bends increases, the effective blower capacity will decrease.
- The duration for purging a space is dictated by not only the size and blower capacity but also by the configuration of some confined spaces. For example, multi-floor-level spaces or baffled spaces, restrict airflow and required additional purging times. In some situations, adequate purging and venting can only be achieved through permanently installed ventilation ducts that will introduce fresh air directly into the space.
- Under no circumstance should entry be allowed at the end of the purging time until the atmosphere is tested and shown to be within acceptable levels. If unacceptable levels are obtained, then it will be necessary to repeat the process.
- If forced air ventilation is necessary to control any existing or potential atmospheric hazards, then the blower must remain in constant operation for the duration of the permit space entry operation.

Permit Required Confined Spaces Entry Procedures

Pre-planning

Before conducting a task in a permit-required confined space there should be a pre-planning discussion between the **Entry Supervisor** and Department supervisor. Items to discuss should include:

- Task to be conducted
- Assigned personnel and roles
- Evaluation of space hazards and methods of mitigation (atmospheric hazards, hazardous energy, engulfment, falling, ect).
- Equipment needed (personal monitors, ventilation equipment, rescue equipment, radios. Ect)
- Method of communication between attendant and entrant
- Rescue team personnel on site and available the day of entry.
- Rescue procedure for specific space (to be discussed with rescue team)

Pre-Entry

- **Entry Supervisor** monitors (if required) and completes the entry permit.
- **Entry Supervisor** conducts pre-entry briefing with all involved personnel that addresses all of the following:

1.Work to be performed
2.Anticipated hazards (including signs, symptoms, and consequences of exposure)
3.Hazard control measures
4.Prohibited conditions
5.Non-entry rescue procedures (if conditions allow)
6.Procedures for activating Rescue Team
7.Other pertinent information addressed on entry permit

- Secure the work site (install barriers as needed, take measures to prevent hazards near the site)
- **Entry Supervisor** verifies that all control measures, procedures, and equipment specified in the entry permit are in place and that entry conditions are acceptable.

Entry

- **Entry Supervisor** notifies EHS that entry has commenced.
- **Entrant** only enters space if it's listed on the permit, entry conditions are acceptable, and all control measures have been implemented.
- **Entrant** dons all required personal protective equipment.
- **Entry Supervisor** verified that acceptable entry conditions are maintained and that entry operations remain consistent with terms of the permit and the hazards associated with the planned work.
- **Attendant** maintains communication with the entrant and performs no other duties that might interfere with his/her ability to observe the entrant.
- **Attendant** control entry by remaining at the work site and keeping an accurate accounting of entrants
- Attendant does not become an entrant unless he/she is both listed as an entrant and has been replaced by a qualified attendant.
- **Entrant** maintains communication with the attendant.
- **Entrant** maintains readiness to exit if ordered by the attendant.
- **Attendant** orders entrant to evacuate the space of one or more of the following occurs:

1.Detects a prohibited condition.
2.Observes any behavioral effects of exposure to any hazard.

1. Identifies a nearby situation that may endanger the entrant.
2.Becomes unable to effectively and safely perform all required duties.

Post entry/documentation

- **Entry Supervisor** notifies EHS when the task is complete, the entrant has safely exited, and the permit has been canceled.
- **Entry Supervisor** conducts a post-entry debriefing with the entrant and attendant.
- **Entry Supervisor** cancels the written permit
- Instances when the permit should be canceled:

1.The job is completed.
2.The end of a work shift.
3.When a change occurs in work conditions or methods that require additional control.
4.When a change occurs that affects acceptable entry conditions.

- **Entry Supervisor** will provide EHS office with copies of the permit to be kept on file for one year.

ALTERNATE ENTRY PROCEDURES

An alternate entry may be performed in a permit-required confined space if there is evidence and documentation that shows:

- All hazards have been eliminated

OR

- All physical hazards have been eliminated and continuous forced air ventilation controls the actual or potentially hazardous atmosphere. There must also be monitoring data that demonstrates the use of continuous forced air ventilation will maintain safe entry.

An entry permit must still be filled out

Internal atmosphere

Test the air in the space before an employee enters. The internal atmosphere must be tested for the following:

- Oxygen content
- Flammable gases and vapors.
- Potential toxic air contaminants

Continuously test the atmosphere within the space to ensure hazards do not accumulate. Use continuous forced air ventilation as follows:

- Wait until the forced air ventilation has removed any hazardous atmosphere before allowing entrants into the space.
- Direct forced air ventilation toward the immediate areas where employees are or will be working. Continue ventilation until all employees have left the space.
- Provide the air supply from a clean source and make sure it does not increase the hazards in the space.

Evacuation

Evacuate employees from the space immediately when any of the following occurs:

- Detection of a hazardous atmosphere by air monitor
- Failure of an air monitor

- Any ventilation failure
- Introduction of a hazard, a hazard develops, or conditions change within the space.

When a space is evacuated, it cannot be re-entered as an alternative method unless you correct the condition that necessitated the evacuation and treat the re-entry as a new entry.

ROLES & RESPONSIBILITIES

Program Administrator – EHS Manager

- Oversees the confined space program and makes policy changes as needed.
- Ensures and/or provides required training.
- Files and maintains canceled permits.

Department Supervisor

- Ensures personnel assigned to permit / confined spaces tasks have received and are up to date on training.
- Participates in Pre-entry planning with Entry Supervisor.
- Ensures that required equipment and PPE are available and are maintained in good working order. Department Supervisor will document the maintenance program.

Entry Supervisor

- Will be a competent person with the knowledge of hazards/potential hazards associated with spaces, mode of exposure, signs/symptoms of exposure, and consequences of exposure.
- Will have the authority to stop work if unsafe conditions exist.
- Conducts pre-entry plan.
- Completes the entry permit and verifies that all elements are correct.
- Verifies that all tests specified on the permit have been conducted, and all procedures and equipment specified on the permit are in place before endorsing the permit and allowing entry to begin.
- Verifies that rescue services are available and that the means for summoning them are operational.
- Removes unauthorized individuals who enter or who attempt to enter the permit space during entry operation.
- Ensures that entry operation remains consistent with the terms of the entry permit and that acceptable entry conditions are maintained.
- Terminates the entry and cancels the permit when the entry operation has been completed or a prohibited condition arises in or near the space.

Attendant

- Has knowledge of hazards/potential hazards associated with the specific permit space

(Including: mode of exposure, signs/symptoms of exposure, and consequences of exposure).

- Remains outside the permit space until termination of the entry or until relieved by another qualified attendant.
- Maintains an accurate account of authorized entrants within the space.
- Maintains communication with entrants to monitor his/her status and to alert the entrant of any need to evacuate the space.
- Monitors activities inside and outside the space to determine if it is safe for entrants to remain in the space or order an evacuation if the attendant:

1.Detects a prohibited condition.
2.Detects behavioral effects in the authorized entrant as a result of exposure to atmospheric hazards.
3.Detects a condition outside the space that could endanger the authorized entrant.

4. Cannot effectively and safely perform all required duties of an attendant.

- Performs no other duties that interfere with primary attendant duties.
- Performs non-entry (tripod) rescues.
- Will not enter the confined space under any circumstances.
- Will activate rescue team if needed.

Entrant

- Will be trained to recognize hazards / potential hazards associated with permit/ confined space entry as well as signs, symptoms, and consequences of exposure.
- Will be trained on and used all equipment and PPE necessary for a safe entry.
- Maintains verbal communication with the attendant.
- Exits from space when ordered by the attendant, experiencing signs or symptoms of exposure, when prohibited conditions exists, or when monitoring alarm sounds.

TRAINING

Training will be provided so that all affected employees who may need to enter confined spaces, or are responsible for acting as an attendant, entry supervisor, or rescuer understand potential hazards and obtain the skills necessary for the safe performance of their assigned duties.

Training will be provided:

- Before an employee is first required to work in a permit/confined space.
- When there is a change of assigned duties.
- When there is a change in the regulations affecting confined space entry that presents a hazard in which an employee has not been previously trained.
- When different equipment such as air monitoring or retrieval is purchased and made available for use in permit space entry.
- When the Department Manager of EHS Manager has reason to believe that either there are deviations from the permit space entry procedures or that an employee is lacking the knowledge and ability to enter a permit/confined space safely.
- Training shall include the duties of each assigned role.

Employees who have active roles of Entry Supervisor, Attendant, Entrant, and Rescue Team will receive annual refresher training.

USE & MAINTENANCE OF EQUIPMENT

Equipment required during entry operations is listed on the permit and may include:

- Air testing and monitoring equipment
- Ventilation equipment
- Communication equipment
- Personal Protective Equipment (PPE)
- Lighting equipment
- Traffic control
- Ladders
- Rescue equipment (such as a tripod)
- Any other equipment necessary for safe entry and rescue (lockout/tag out, fall protection, etc.)

The Department Supervisor will ensure that entry equipment and PPE are maintained in good working order and will document as such.

Employees using equipment and required PPE will also ensure to inspect it before use to ensure that it is in good working order. If deficiencies are noted, equipment shall be removed from service immediately and reported to the Department Supervisor.

Respiratory Protection in Permit Required Confined Space
Respiratory protection may be required if an airborne hazard is present while conducting work inside the confined space (such as welding, grinding, painting, etc.).
In order to be authorized for respirator use employees must:

- Receive consent from the EHS Office
- Receive respirator training
- Participate in medical evaluation
- Be fit tested

OUTSIDE CONTRACTORS

When a contractor must perform work that involves permit required/ confined space entry, The Evergreen State College Project Managers shall:
·Inform the contractor that the workplace contains permit spaces and the permit space entry is allowed only through compliance with a permit space program meeting the requirements of this plan.

- Apprise the contractor of the elements, including the hazards identified and TESC's experience with the space, that make the space in question a permit space.
- Apprise the contractor of any precautions or procedures that TESC has implemented for the protection of employees in or near permit spaces where contractor personnel will be working.
- Coordinate entry operations with the contractor, when both TESC employees and the contractor will be working in or near permit spaces.
- Debrief the contractor at the conclusion of the entry operations regarding the permit space program followed and regarding any hazards confronted or created in permit spaces during entry operations.

When a contractor must perform work that involves permit required/ confined space entry, The Evergreen State College EHS Safety Manager shall:

- Request a copy of the contractor's Confined Space Program
- Ensure that the contractor has completed their own entry permit

The College will communicate to the contractor that when their work requires entry into a confined space by their employees, it will be the responsibility of the contractor to ensure the safety of the space through monitoring, blowing, etc. The contractor will be responsible for acquiring, maintaining, calibrating, and using their own confined space entry equipment.

EMERGENCY RESCUE PROCEDURES

Self-Rescue

These procedures apply when the entrant or attendant determines that an unsafe situation exists or is developing and the entrant is physically and mentally capable of exiting the confined space on their own and there are no obstructions to impede their efforts.

- Entrant must evacuate the confined space if the concentration of oxygen in the confined space goes below 19.5% or above 23.5%.
- Entrant must evacuate the confined space if the air sampling equipment alarm indicates that hazardous substance levels exceed safe levels.
- Entrants must immediately evacuate the confined safe if they begin to feel or notice adverse health effects.
- The attendant or entrant should initiate evacuation if any ventilation equipment being used malfunctions.
- Entrants must evacuate the confined space if the attendant must leave their post and a competent replacement is not available.
- The confined space must be evacuated if any safety equipment malfunctions, a previously unidentified hazard is noted or a potentially dangerous situation develops.
- There is a loss of communication with employees in the confined space.
- The space must be evacuated if the attendant observes any entrant acting in an abnormal fashion.

·Entrants must immediately evacuate a confined space when told to do so by the attendant.

VERTICAL OR HORIZONTAL NON-ENTRY PROCEDURES

These procedures define a process where the rescuer does not enter the confined space. A retrieval system is used to extract the entrant because the entrant is unable to self-rescue. The extraction route must be large enough to accommodate the employee being rescued, is a straight run horizontally and vertically, and there are no obstructions that would impede the rescue for these procedures to work. The rescue system must be set up and the entrant connected to the safety line before entering the confined space.

- Communicate with the injured entrant or another entrant in the space and identify the cause and nature of the injury.
- Extract the injured entrant from the space using mechanical lifting equipment.
- Maintain communications with the entrant while they are being extracted.
- If the entrant is injured or will need medical assistance, call Police Services at (360) 867-6832. Alert them of what is happening, where, and have them call 911. Police services will be able to direct the ambulance to your exact location on campus.
- Once the injured entrant is outside of the confined space, provide first aid as required. Ensure that they are comfortable and stay with them until medical assistance arrives.
- Do not allow anyone to re-enter the confined space until it has been confirmed that it is safe to do so.

These procedures must be followed when it is necessary for rescuers to enter the confined space to extract the entrant. This type of rescue is necessary when the entrant cannot self-rescue and one or more of the following conditions exist:
1.There are turns in the exit route
2.The floor is uneven
3.There are obstructions (such as pipes, beams, water, etc.)
4.The entrant is not connected to a lifeline
5.The entrant has been injured and must be stabilized before moving
Procedures
·Call Police Services at (360) 867-6832 and alert them what is happing, where, and ask them to call 911. Police services will be able to direct the ambulance to your exact location on campus.

- Attempt to communicate with the entrant in the confined space to establish what injuries exist and what conditions exist that may impede the rescue efforts.
- Check the atmospheric conditions to determine of respirators are needed.
- Confirm that all communication equipment is working.
- Ensure that an attendant is in place outside the point of entry to assist the rescue team.
- Rescue team enters the space and provides any first aid that may be required to stabilize the injured entrant.
- Prepare the entrant for extraction.
- Rescuers must ensure the safety of the injured entrant during the extraction procedure.
- Once outside the confined space, provide any additional first aid required to stabilize the entrant until the ambulance arrives.

Secure the area and ensure that one enters the confined space until it has been re-assessed and deemed safe to enter.

SPACE SPECIFIC RESCUE PLANS

Space-specific rescue plans are addressed in The Evergreen State College's comprehensive confined space identification program.
Under no circumstances is any employee to enter a confined space for the purpose of executing a rescue unless they have been trained and certified to perform confined space rescues and are equipped with the required personal protective equipment.

the evergreen state college

CONFINED SPACE ENTRY PERMIT

Location of Work:
Type of Confined Space: _____
Reason for Entry: Inspection Repair Cleaning Maintenance
___Other (Note): _____
Entry Date/Time: Expiration Date:
Trained Confined Space Entry Worker(s): _____
Trained Attendant(s):
Trained Standby Person(s):
Known or Potential Hazards: ___ Atmospheric ___ Fire ___Engulfment
Configuration Mechanical Pre-Opening Other
(Other):_____
Method(s) of Communication:
Pre-Entry Tests (List sampling equipment used)
Model Serial # Calibration Date
Calibration Tech:_____
Location Time % Oxygen LEL H2S CO
(19.5 - 23.5) (<10%) (<10 ppm) (<35 ppm)

_____

Tests Performed By: _____
THIS SPACE IS CLASSIFIED AS: ___ Permit ___ Non-Permit
(Permit must remain at site until job is completed. The permit is valid for one shift only. When completed, turn permit in to supervisor.)
For permit spaces, complete following information:
N/A YES NO
Blanking and/or disconnecting ____ ____ ____
Electrical
Mechanical ____ ____ ____
Purging, Inerting
Mechanical Ventilation (required) ____ ____ ____
Trenching and Shoring
Other _____ ____ ____ ____
Emergency phone numbers: 911, , ,
Space specific rescue procedures:

I certify this confined space, the assigned personnel, and the procedures to be followed are in compliance with the Evergreen State College Confined Space Policy.
Entry Supervisor/Competent Person: Date

ALTERNATE ENTRY PROCEDURE AND PERMIT

To be used where ALL physical hazards have been eliminated in the space and actual or potentially hazardous atmosphere can be controlled with forced air ventilation alone. If these conditions change, a Confined Space Entry Permit is required. Evergreen State College employees are only authorized to enter confined spaces after having received training in specialized entry procedures. Notify Supervisor or EHS before entering and upon exiting the space.

Date:
Duration of entry:
Location:
Hazards in space:
Measures used to eliminate hazards:
Person(s) entering the space:

-
-
-

PREPARATION

1.Check air monitor calibration status and battery condition,
2.Protect Entry Perimeter,
3.Arrange for forced-air ventilation equipment and power supply,
4.Arrange for an attendant person and means of communicating to attendant, police and security.

ON-SITE MONITORING

1.Before entry, test air at the top of the space through the cover, if possible. Record the results.
2.If acceptable, open the cover. Test the air at the middle and bottom of the space. Record the results. If the combustibi reading at the bottom is greater than at the top of the space, notify your supervisor and the Environmental Health and Safety Department. DO NOT ENTER THE SPACE!
3.If the air is not safe, ventilate, purge and retest. If the atmosphere does not clear, DO NOT ENTER THE SPACE!
4.Once an acceptable atmosphere is obtained, ventilate the space for at least 10 minutes.
5.**Continuously ventilate and monitor the space**. Record the monitoring results every 15 minutes and perform period communication checks with entrant. Retest the air after breaks and lunch. Additional space is provided on back of this document.

TIME OF READING	**OXYGEN** Safe Range (19.5-23.5%)	**LEL** Safe Range (<10%)	**CO** Safe Range (<35ppm)	**H2S** Safe Range (<10 ppm)
Pre-Entry:	Top of Space:_____ Middle of Space:____ Bottom of Space:___	Top of Space:_____ Middle of Space:____ Bottom of Space:____	Top of Space:_____ Middle of Space:____ Bottom of Space:____	Top of Space:_____ Middle of Space:____ Bottom of Space:____
Time of Entry:		**Time of Exit:**		

MONITORING MEASUREMENTS

Instrument Name: _____ Model Number: _____ Serial Number: _____

Pre-Entry Condition Verified By (Print/Sign): _____/_____

EMERGENCY AND RESCUE PROCEDURES

- Initiate self or non-entry rescue if feasible. DO NOT ENTER THE SPACE TO PERFORM RESCUE!
- Notify EHS and Police Services
- Indicate location and that the incident involves a Confined Space Emergency

Entry Supervisor's Signature _____ Date _____

Monitoring Measurements (Continued)

Time of Reading	Oxygen Safe Range (19.5-23.5)	LEL Safe Range (<10%)	CO Safe Range (<35 ppm)	H2S Safe Range (<10 ppm)

TIME OF EXIT:

DEBRIS CLEAN UP PROGRAM

Policy Overview

Evergreen has vast undeveloped forests that surround the campus and it is likely that debris sites have the potential to emerge on and/or around campus. As such there may be instances when the cleanup of a site is necessary. This program outlines training and standard procedures for cleanup operations.

SITE ASSESSMENT

Police Services will assess and notify The Facilities Manager and/or EHS of abandoned sites that require clean-up.

Before conducting any cleanup work an assessment of the site will be conducted by EHS and the Facilities Manager to determine if the scope of work requires the expertise of a cleanup vendor or if the potential of site hazards is low enough that staff can conduct the task.

If it is determined that staff are going to conduct the cleanup, a site-specific job hazard analysis will be drafted and address the following:

- Scope of work
- Personnel involved (staff, police services, etc.)
- Required PPE
- Engineering controls/equipment

COORDINATING WITH POLICE SERVICES

Anytime a clean-up operation of an unauthorized and vacated living space occurs it will be coordinated with polices services so that an officer can be present with the crew during clean-up. If the officer needs to leave to attend to another call/situation, then the cleanup operation will cease until an officer is able to provide on-site assistance.

TRAINING

Employees who have the potential to be exposed to bloodborne pathogens and/or OPIM as part of a cleanup effort will receive bloodborne pathogen training and training on the debris clean-up policy and procedures before conducting any work that involves the cleanup of a debris site.

BLOODBORNE PATHOGEN HAZARDS

Bloodborne pathogens are microorganisms that can cause serious illness or death when transmitted through blood and bodily fluids. Even small droplets of blood can contain pathogens that could harm an exposed employee. Other potentially infectious materials (OPIM) include human body fluids and human tissue other than intact skin. Bloodborne pathogens and OPIM are hazards associated with living on the street, but they also pose hazards for workers. When they are working in public spaces, employees should always be aware of their risk of exposure to these hazards/ sources of bloodborne pathogens and OPIM including:

- Waste receptacles used by the public, which may contain needles
- Hidden needles discovered during routine cleaning
- Medical events involving blood and other human body fluids
- Laundry that has been contaminated with blood or OPIM, or that may contain needles

Human waste

Human waste (feces and urine) is not a bloodborne pathogen unless it contains human blood. However, employees shall treat any human waste they encounter as if it does contain bloodborne pathogens or other potentially infectious material. Employees will take the following precautions when cleaning up human waste:

·Put on disposable gloves

·Solid waste – Scoop up solid waste using a disposable scoop, deposit the scoop and waste in a plastic garbage bag

·Liquid waste – Pour absorbent material, and use a disposable scoop to put the material in a plastic garbage bag. Pour 10% bleach solution onto all contaminated areas of the surface. Let the bleach solution remain on the contaminated area for 20 minutes, then wipe up the remaining bleach solution

Needles and other sharps

Used needles and other sharps pose a threat to employee health and safety because they have the potential to be contaminated and spread serious infections such as Hepatitis B, Hepatitis C, and HIV. If disposing of needles or sharps employees will conduct the following:

·Don proper PPE including work boots and puncture-resistant gloves

·Retrieve needle/sharps with a grabber tool

·Place needle/sharps in a designated sharps container.

ELEVATOR USE PROGRAM

Policy Overview

This program addresses the requirements for staff who use campus passenger elevators for the movement of large equipment as well as the procedures necessary for granting approval for locking out elevators. Elevators on the college's campuses are considered passenger elevators regardless of size or capacity. For that reason, the movement of freight or large pieces of equipment need special consideration and the following protocols should take place prior to moving any items in an elevator

MOVING EQUIPMENT VIA ELEVATOR

Responsibilities of staff:

·Determine the weight of each piece of equipment or freight (including hand trucks if used) to be transported.

·If each piece of equipment/freight weighs less than 25% of the elevator capacity or less than 500 lbs. (whichever is less) then elevator use for transportation is acceptable.

·Staff must ensure that:

1. Care is taken when moving equipment/material off and on the elevator.
2. Equipment/material is centered within the elevator cab.
3. Staff may add multiple pieces of equipment that fall into this weight class into the elevator up to 80% capacity, as long as the weight is centered and secured.

·If an individual piece of equipment/material weighs more than 25% of the elevator capacity (or 500 lbs.), staff must contact the Facilities Manager or EHS Manager for authorization.

Responsibilities of Management:

If the piece of equipment is 25% to 50% of the elevator capacity the following must be ensured:

- Facilities Manager, Supervisor, or EHS Manager must be present for the loading/unloading
- Ensure to limit the imbalance of the car created when moving the equipment on/off the elevator.
- Ensure that the equipment/material is centered within the elevator car.
- Ensure that equipment wheels are locked/blocked.
- Ride with no more than one person in the car.
- If any concerns exist, call Evergreen's elevator maintenance contractor for guidance.

LOCKING OUT AN ELEVATOR

Elevator lockout is not often performed, however, in the case an elevator needs to be locked out the below procedures will be followed:

- Staff who will be conducting the lockout will notify the EHS in advance. No lockout will occur until staff receives confirmation/authorization from the Facilities Manager or EHS Manager.
- EHS Manager will contact the elevator maintenance contractor for approval of lockout.

FALL PROTECTION PROGRAM

Policy Overview

It is the policy of The Evergreen State College that whenever employees are exposed to a hazard of falling from a location four (4) feet or more in height, an appropriate fall protection program is in place to ensure that fall arrest or restraint systems are used to safeguard the exposed employees from serious injury or death.

The Environmental Health and Safety Manager will be responsible for providing and updating campus-wide procedures and assisting departments with the implementation of the program.

This policy is designed to enable employees to recognize specific hazards during work activities and to establish procedures that are to be followed in order to prevent falls. Employees covered by this policy will be trained in these procedures and are required to strictly adhere to them.

Employees should always attempt to avoid fall hazards by carefully planning their work activities. In addition, any employee that has not received fall protection training will be assigned or allowed to go to any portion of a worksite where they are exposed to a fall hazard as defined by this policy.

It is the responsibility of each affected employee's supervisor to ensure their employees understand and adhere to the instructions and procedures of this policy.

FALL PROTECTION REQUIRED AT 4 FEET

Employees are required to use a method of fall protection any time they are exposed to a fall measuring 4 feet or more. This includes but is not limited to: working from roofs, platforms, walkways, vehicles etc.

FALL PROTECTION WORK PLANS

Any time employees are conducting any type of work where they are exposed to a fall hazard of 10 feet or more, a fall protection plan will be filled out and employees will be trained on it.

A new fall protection work plan will be drafted for each activity unless the activity is a daily occurrence and there are no new conditions.

A copy of the fall protection work plan will be kept at the site-specific location until the task has been completed.

It is the responsibility of the supervisor to submit a signed copy of the plan to the EH&S Office which will be kept on permanent file.

RESCUE PLANS

On-Site Rescue

Even when a fall protection system works properly, the fallen worker is still in danger. The worker's body weight places pressure on the harness straps, which can compress the veins, and cause blood to pool, in the lower extremities and reduce blood return to the worker's heart. This condition is called suspension trauma, also known as harness hang syndrome. In medical terms, this results in orthostatic intolerance. If the pressure is not reduced promptly, the worker can lose consciousness within minutes.

A rescue plan must be incorporated into the fall protection work plan. The project supervisor must assess the work and environment and determine what equipment is available (i.e. lift, ladder, etc.) to retrieve the fallen employee in a timely manner should the need arise.

Self-Rescue

Suspension trauma straps are available on campus and should be utilized when possible.

Alternative Rescue

Any time employees are working on a surface where there is a fall potential and employees could not be retrieved by means available at the college (thus the fire department or other agency would need to step in and assist) an alternative rescue plan will be developed. The EHS Office will coordinate with the responding agency to ensure that they are capable of assisting and are aware of the activity schedule.

FALL PROTECTION SYSTEMS

Guardrails

Guardrails will be constructed of a top, mid, and bottom rail with a top height of 39-45 inches.
Posts must be spaced no more than 8 feet apart.
Guardrails must be capable of withstanding an applied load of at least 200 lbs.

Rope & Harness System

Rope and harness systems will consist of a full-body harness, shock-absorbing lanyard, and rope.
Ropes will be tied off to anchors and harness with connectors and will not be attached via tying back to itself or a knotting system as this weakens the strength of the rope by 50%.
When first hired and before working at heights, employees will be provided with fall protection training that includes hands-on instruction on how to properly don and use fall protection equipment.
Ropes and harnesses will be inspected by the user each time before use. The EHS Office will also inspect equipment periodically.
Any equipment found in poor condition will be removed from service immediately and reported to the Safety Manager for removal of service.
If a set of fall protection equipment has been subjected to a fall, it immediately needs to be reported to the Safety Manager and permanently taken out of service.
When installing ropes, employees will ensure that ropes are protected from cuts when positioned over sharp edges
Where lanyards, connectors, and lifelines are subject to damage by work operations such as welding, chemical cleaning, and sandblasting, the component should be protected, or other securing systems should be used
Fall restraint (A system in which all necessary components function together to restrain/prevent an employee from falling to a lower level) is the preferred method of fall protection. However, when using a rope and harness system as a means of a fall arrest system (a fall protection system that will arrest a fall from elevation) employees shall ensure that the system is set up so that there is no more than 6 feet of free fall.

EQUIPMENT INSPECTION

Harness Inspection

To maintain their service life and high performance, all harnesses must be inspected prior to each use for mildew, wear, damage, and other deteriorations. Inspect your equipment daily and replace it if any of the defective conditions are found.

- Beginning at one end, holding the body side of the belt or harness toward you, grasp the belt with your hands six to eight inches apart. Bend the belt in an inverted "U". The surface tension resulting makes damaged fibers or cuts easier to see.
- Follow this procedure the entire length of the belt or harness. Watch for frayed edges, broken fibers, pulled stitches, cuts, or chemical damage.
- Special attention should be given to the attachment of buckles and dee rings to the webbing. Note any unusual wear, frayed or cut fibers, or distortion of the buckles or Dee rings.
- Inspect for frayed or broken strands. Broken webbing strands generally appear as tufts on the webbing surface. Any broken, cut, or burned stitches should readily be seen.
- Rivets should be tight and immovable with fingers. The body side rivet base and outside rivet burr should be flat against the material. Bent rivets will fail under stress. Especially note the condition of Dee ring rivets and Dee ring metal wear pads (if any). Discolored, pitted, or cracked rivets indicate chemical corrosion.
- The tongue or billet of the belts receives heavy wear from repeated buckling and unbuckling. Inspect for loose, distorted, or broken grommets.
- Tongue Buckle- Buckle tongues should be free of distortion. The outer bars and center bars must be straight. Pay special attention to the corners and attachment points of the center bar.
- Friction Buckle- Inspect the buckle frame and sliding bar for cracks, distortion, or sharp edges.
- Sliding Bar Buckle- Inspect the buckle frame and sliding bar for cracks, distortion, or sharp edges. The sliding bar should move freely. Knurled edge will slip if worn smooth. Pay special attention to the corners and ends of the sliding bar.

Lanyard inspection

When inspecting lanyards, begin at one end and work to the opposite end. Slowly rotate the lanyard so that the entire circumference is checked. Spliced ends require particular attention.

- STEEL – While rotating the steel lanyard, watch for cuts, frayed areas, or unusual wearing patterns on the wire. Broken strands will separate from the body of the lanyards.
- WEBBING – While bending webbing over a pipe or cylindrical object, observe each side of the webbed lanyard. This will reveal any cuts or breaks. Swelling, discoloration, cracks, and charring are obvious signs of chemical or heat damage. Observe closely for any breaks in stitching.
- ROPE - Rotation of the rope lanyard while inspection from end to end will bring to light any fuzzy, worn, broken, or cut fibers. Weakened areas from extreme loads will appear as a noticeable change in original diameter. The rope diameter should be uniform throughout, following a short break in period.

ANCHORS

When using a shock-absorbing lanyard or a self-retracting (yo-yo) lifelines part of a fall arrest system, installed anchors must be capable of supporting 3,000 pounds per employee.
Anchors will be used in a one-employee-to-one anchor ratio unless otherwise specified by the anchor manufacturer.

BOOM LIFTS

Even though boom lifts have guardrails around the work platform they still pose the fall hazard of employees bouncing out when in motion or due to environmental forces.
Employees must utilize a full-body harness and lanyard attached to the manufacturer's attachment point at all times
The harness and lanyard must be inspected by the user before use. The EHS office will also inspect equipment periodically.
Never climb the rails of the work platform or stand on items such as buckets to gain additional height.

SCISSOR LIFTS

Employees must utilize a full-body harness and lanyard attached to a suitable anchor point at all times.
The harness and lanyard must be inspected by the user before use. The EHS office will also inspect equipment periodically.
Never climb the rails of the work platform or stand on items such as buckets to gain additional height.

WORKING FROM ROOFS

Skylights

Skylights pose a major fall hazard when working on roofs. Often employees are unaware of their fragility and have the potential to sit on them or trip and fall through them. As such, special care will be given when working on or around skylights.
When working on a roof where skylights are installed, employees must use a rope and harness system of fall protection.
In limited situations where a rope and harness system is not feasible, skylights will be guarded by a guard rail.
In instances where skylights have been removed, the resulting hole will be covered, secured, and marked “hole”.

WARNING LINE & SAFETY MONITOR SYSTEM

Monitor System

The safety monitor system may be used in conjunction with a warning line with approval from the EHS Office.
When working from a flat roof where other means of fall protection are not feasible and adverse weather conditions are not present the safety monitor system may be used.
A fall protection work plan will be developed by the Supervisor of the project.
The Safety Monitor will be trained in their duties (including doing no work other than monitoring and warning employees when they are approaching a fall hazard) prior to the start of work.
The Safety Monitor will don personal protective equipment that distinguishes them from the rest of the crew.
The Safety Monitor will only supervise 8 employees at a time. If more than 8 employees are needed on the roof, a second Safety Monitor will be added.
A warning line is not required when performing roofing work on roofs less than 50 feet wide

Warning Line

Warning line systems can only be used on flat roofs.
Warning lines must be erected around all unprotected sides and edges of the work area.
Points of access, material handling areas, and storage areas must be connected to the work area by a clear access path formed by two warning lines.
If conducting roofing work, a warning line will be erected no less than 6 feet from the edge.
If conducting non-roofing work, a warning line will be erected no less than 15 feet from the edge.

Safety Watch System

When conducting repair work or servicing equipment (HVAC, etc.) employees may use the safety watch system on a flat roof where the work is at least 6 feet back from the edge and there are no adverse weather conditions.
Employees will fill out a fall protection work plan that designates that the safety watch system is being used as a method of fall protection and notes who the safety watch is.
The safety watch system will only consist of two employees (1) employee engaging in the work, (2) safety watch employee.
Safety watch employee will receive training in their duties (including doing no work other than monitoring and warning employee when they are approaching a fall hazard) before work begins.

Contractors

When a contractor must perform work that involves a fall protection work plan, supervisors shall:

- Inform the contractor that the work requires a fall protection plan and that the TESC project manager will review the plan prior to the start of work.
- Apprise the contractor of the elements, including the hazards identified and TESC's experience with the space, and
- Apprise the contractor of any precautions or procedures that have been implemented for the protection of employees in or near spaces where contractor personnel will be working.

FALL PROTECTION WORK PLAN

Identify all fall hazards 10 feet or more above the ground level or lower level. Check all that apply.

- ☐ Open-sided floors
- ☐ Decks/Balconies
- ☐ Floor openings
- ☐ Skylight openings
- ☐ Wall openings
- ☐ Window openings
- ☐ Door openings
- ☐ Roof openings
- ☐ Leading edge work
- ☐ Other_____

Methods of fall protection to be used: (LSO = Low Slopes Only. Low Slopes = 4 x 12 or less)

- ☐ Guardrail system (LSO)
- ☐ Warning line System (LSO)
- ☐ Catch platform
- ☐ Safety net
- ☐ Covers
- ☐ Personal fall arrest system
- ☐ Personal fall restraint system
- ☐ Positioning device system
- ☐ Horizontal life lines
- ☐ Vertical life lines & rope grab
- ☐ Safety watch system (LSO)
- ☐ Warning line w/ safety monitor (LSO)

Name of safety watch or monitor (if used): _____

Overhead Hazard Protection Methods

- ☐ Hard Hats
- ☐ Overhead Hazard Signs
- ☐ Debris Nets
- ☐ Other: _____
- ☐ Toe boards on Guardrails
- ☐ Screens on Guardrails
- ☐ Barricade to control Access to Area
- ☐ Other: _____

Describe procedures for assembly, maintenance, inspection, disassembly of fall protection system to be used.

_____

_____

Describe procedures for handling, storage, and securing tools, equipment, and materials.

_____

_____

Describe methods of overhead protection for workers who may be in or pass through work area.

_____

_____

Describe methods to be implemented for prompt, safe removal of injured worker(s).

Employees who received fall protection training on the above site-specific fall protection work plan.

Name(s):	Date:

The competent person's signature verifies that the fall protection work plan has been done, the employees informed of the plan and that employees have received training in the fall protection systems in use:

Name	Title	Date

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HARNESS & LANYARD INSPECTION CHECKLIST

The following are fall protection equipment inspection guidelines. Perform a pre-use visual and touch inspection of each piece of equipment.

- A ✓ mark next to an item denotes a pass in inspection.
- An X mark denotes a fail. Always defer to the manufacturers inspection procedures that came with your equipment.

Webbing

☐ Cuts, nicks or tears	☐ Webbing thickness uneven
☐ Broken fibers/cracks	☐Mildew (clean harness)
☐ Overall deterioration	☐ Missing Straps
☐ Modifications by user	☐ Undue Stretching (indicates possible fall)
☐ Fraying/Abrasions	☐ Burnt, charred or melted fibers
☐Discoloration of material	☐Material marked w/permanent marker
☐ Hard or shiny spots (indicates heat damage)	☐ Excessive hardness or brittleness

Stitching

☐ Pulled stitches	☐ Hard or shiny spots (indicates heat damage)
☐ Stitching that is missing	☐ Cut stitches
☐Discoloration of stitching	☐ Modifications by user

Hardware

☐ Distortion (twists, bends)	☐ Cracks or breaks
☐ Rust or corrosion	☐ Rough or sharp edges
☐ Broken/distorted grommets	☐ All springs in working condition
☐ Modification by users	☐ Bars not straight
☐ Tongue buckle does not overlap the buckle frame or move freely in their socket	☐ Roller of tongue buckle does not turn freely on frame

Snap Hook

☐ Snap hook is self-locking	☐ Modifications by the user
☐ Overall deterioration/excessive wear	☐ Rust/pitting/corrosion
☐ Missing parts	☐ Cracks
☐ Rough or sharp edge	☐ Keeper does not open freely
☐ Keeper does return to closed position	☐ Lateral movement
☐ Closes slowly	☐ Hook or eye distortion
☐ Locking mechanism does return to engaged position	☐ Latch/keeper seated into the nose w/o binding

Tagging System

(Every harness must have a legible tag identifying the harness, model, date of manufacture, name of manufacturer, limitations and warnings.)

☐ Check tag for date of manufacture (remove from service if past adopted service life policy.)	☐ Tagging system is missing or not legible (remove harness from service.)

Name:_____ Signed:_____

FORKLIFT PROGRAM

Policy Overview

The Evergreen State College has developed a forklift safety program to safeguard employees that work with and around forklifts. This program establishes training and standard procedures for all employees and is intended to prevent forklift-related incidents.

TRAINING

All employees who operate a forklift will receive informational training on the proper operation and Evergreen policies as they pertain to forklifts. Employees will also complete a hands-on evaluation with a competent person before they are signed off and allowed to operate as a designated forklift operator. Training will cover the following:

- Operating instructions
- Warnings and precautions for the types of power industrial trucks the operator will be authorized to operate.
- power industrial truck controls; where they are located, what they do, and how they work
- Engine operation
- Steering and maneuvering
- Visibility restrictions
- Fork and attachment adaptation, operation, and use limitations
- Power industrial truck capacity and stability
- Power industrial truck inspection and maintenance
- Refueling
- Operating limitations

Operator performance evaluations must be conducted as part of initial training and at least once every three years thereafter.

INSPECTIONS

It is the responsibility of the operator to conduct an inspection of the equipment at the start of the shift before use. Operators will inspect the following:

- Fluid levels
- Hydraulic hoses for leaks and cracks
- Tire condition and pressure
- Fork condition (no significant dings and/or modifications)
- Functioning seatbelt
- No overhead obstruction on the cab roof
- Horn, brakes, chains, lights, and steering are operational

If any deficiencies are found, the Department Supervisor and EHS Manager will be notified immediately and the equipment will be tagged out of service until repaired.

SEATBELTS

Seatbelt use is required 100 % when working from a forklift. Lack of seatbelt use will result in disciplinary action. One of the major hazards associated with forklift use are tip overs. Wearing a seatbelt ensures that the operator stays within the can and does not become crushed under the weight of the forklift
Staff will ensure before operating a forklift that the seatbelt is in place and in good working order. Any deficiencies or lack of a seatbelt will be immediately noted to the Department Supervisor and EHS Manager and taken out of service until repaired.

LOADING DOCKS & TRAILERS

If loading a truck trailer, the forklift operator is to conduct a visual check and ensure that trailer tires are chocked. Evergreen forklift drivers will communicate to the truck driver that the forklift operator is the only personnel authorized to remove chocks. The forklift driver will ensure that the dock plate and interior surfaces can support the weight of the forklift.

FORKLIFT MODIFICATIONS

Forklifts may not be modified in any way without prior written approval from the manufacturer. If a forklift attachment is to be purchased and used it must be consulted with by the EHS office which will obtain the manufacturer's written approval. Any unauthorized modification found on a forklift will require the forklift to be immediately tagged out of service until it can be repaired to its original state as required by the manufacturer.
Examples of forklift modification include but are not limited to:

- Attachments such as fork extenders, man baskets, etc.
- Drilling holes in forks
- Attaching boards (or any other material) on top of the cab
- Removing/disabling seatbelt
- Adding weight to counterbalance
- Overriding safety devices

USING A FORKLIFT AS A LIFTING DEVICE

The forklift will not be rigged to lift suspended loads unless it is mounted with a hook lifting device that has been approved by the EHS office and forklift manufacturer. Using chain and/or slings tied directly to the forks is not allowed per Washington State standards and the Evergreen safety program.
Staff who are not certified in rigging are prohibited from conducting rigging duties per Washington State standards and the Evergreen Safety program.

UNATTENDED FORKLIFT

A forklift is considered unattended when the operator is more than 25 feet away or cannot see the forklift from their position. When a forklift is unattended the operator must ensure to:

- Fully lower the forks
- Neutralize the controls
- Shut off power
- Set the brake
- Block the wheels (if on an incline)

PROTECTING THE OPERATOR AND OTHER STAFF WORKING AROUND THE FORKLIFT

Forklift hazards can not only affect the operator but also have the potential to affect those working in the vicinity of the forklift. As a result, operators must ensure the following for themselves and when working around others:

- Do not drive up to anyone in front of a fixed object.
- Do not allow yourself or other personnel to work from underneath the forks.
- Do not allow yourself or other personnel to put any body part between the uprights of the mast.
- Do not allow others to ride the forklift while in operation.
- Keep your hands and legs inside the forklift cab at all times.

HAZARD COMMUNICATION PROGRAM

Policy Overview

The general purpose of this program is to ensure that Evergreen State College employees are informed and trained on the hazard communication standard, the location and hazardous properties of the chemicals used in the workplace, and the protective measures required. The program applies to all locations where you might be exposed to hazardous chemicals during normal working conditions or an emergency.

TRAINING

The EHS Manager is responsible for ensuring and reviewing hazard communication training for employees. Prior to starting work, employees using or potentially exposed to hazardous chemicals will receive initial training on the hazard communication standard and the safe use of those chemicals. Additional training will be conducted when a new chemical hazard is introduced into the workplace or a deficiency in employee use of chemicals is noted.

Training will include the following:

- A summary of the hazard communication standard and its purpose.
- Location of Evergreen's written hazard communication program.
- A review of the chemical inventory list and location of safety data sheets.
- Informing employees of any operations in their work area where hazardous chemicals are present.
- How to read chemical labels and review safety data sheets to obtain appropriate hazard information.
- The physical and health hazards of the chemicals in the work area.
- The methods and observation techniques used to determine the presence of a hazardous chemical release.
- The measures employees can take to protect themselves, including procedures the department has implemented to minimize employee exposure to hazardous chemicals.
- The emergency procedures to initiate in the event an employee is exposed to a hazardous chemical.

HAZARDOUS NON-ROUTINE TASKS

Periodically, employees may be required to perform non-routine tasks involving hazardous chemicals. Prior to starting work on any non-routine task, affected employees will be given information and training by their supervisor. This information and training will include:

- The specific hazards related to the non-routine task.
- Protective measures required.
- Steps the department is taking to reduce chemical hazards.
- Emergency procedures.

CHEMICAL INVENTORY LIST

The EHS office will maintain a list of the hazardous chemicals used by staff and update the list as necessary. The list will be updated immediately upon receipt upon receipt of any chemical. The identity of each chemical on the list must match the name on the container label and the same on the safety data sheet. The chemical inventory list is located in EHS lists.

CONTAINER LABELING

The Department Supervisor will ensure that all primary and secondary containers of hazardous chemicals in their area are properly labeled. Labels on containers from the manufacturer are to list the following:

- Product name
- Signal word (such as Danger or warning)
- Hazard statement(s)
- Pictogram
- Precautionary statements(s)
- Name and address of chemical manufacturer

All secondary containers are to be labeled. Information on secondary labels must include the chemical identity and the hazard information from the manufacturer's label.

SAFETY DATA SHEETS (SDS)

A safety data sheet is a written document describing the identification of the common name(s) of the product, chemical substances, physical and health hazards, entry route(s), permissible exposure limit, and any general precautions or controls for safe handling. The document also includes emergency first aid procedures, the date the SDS was prepared, and the name, address, and telephone number of the chemical manufacturer.

The Department Supervisor and/or EHS Manager are responsible for obtaining safety data sheets for the department. SDS will be obtained when new chemicals are procured. The EHS Manager will review any new SDSs for safety and health information and convey any new information and training to affected employees.

SDSs are located electronically in EHS's Microsoft lists database and are available for all employees to review at any time. If it's noted that an SDS is not available for a chemical on-site, the EHS Manager or Department Supervisor will be notified and an SDS will be obtained.

(Safety data sheets are defined as an employee exposure record and therefore must be retained for 30 years)

CHEMICAL SPILLS

The department will manage chemical spills in such a manner as to prevent injury or illness to clean up workers. If there is a chemical spill of an unmanageable size or toxicity, EHS will be notified to coordinate a cleanup by an appropriate vendor. Only spills incidental to normal work practices may be cleaned up by employees. All other spills will only be cleaned by employees who are specifically trained in spill management techniques and who are trained to wear the appropriate PPE.

CHEMICAL EXPOSURE INCIDENT PROCEDURE

In the event an employee may have been overexposed to a hazardous chemical after the necessary medical care has been provided the Department Supervisor must complete an accident report form. The following information will be documented:

·The specific chemical employee was exposed to
·The duration of exposure
·The type of exposure (inhalation, ingestion, skin contact)
·Personal protective equipment used

(This report is considered an employee exposure record and will need to be kept on file for 30 years. See WAC 296-901-14014)

GHS PICTOGRAMS AND HAZARDS

Health Hazard

- Carcinogen
- Mutagenicity
- Reproductive Toxicity
- Respiratory Sensitizer
- Target Organ Toxicity
- Aspiration Toxicity

Flame

- Flammables
- Pyrophorics
- Self-Heating
- Emits Flammable Gas
- Self-Reactives
- Organic Peroxides

Exclamation Mark

- Irritant (skin and eye)
- Skin Sensitizer
- Acute Toxicity (harmful)
- Narcotic Effects
- Respiratory Tract Irritant
- Hazardous to Ozone Layer (Non-Mandatory)

Gas Cylinder

- Gases Under Pressure

Corrosion

- Skin Corrosion/ Burns
- Eye Damage
- Corrosive to Metals

Exploding Bomb

- Explosives
- Self-Reactives
- Organic Peroxides

Flame Over Circle

- Oxidizers

Environment (Non-Mandatory)

- Aquatic Toxicity

Skull and Crossbones

- Acute Toxicity (fatal or toxic)

HEARING CONSERVATION PROGRAM

Policy Overview

Evergreen is committed to maintaining a safe and healthy work environment. It is Evergreen's policy to eliminate potential noise exposures through the use of effective engineering and administrative controls whenever possible. Hearing protection should be used when effective engineering and administrative controls are not feasible. This program establishes procedures for noise reduction and monitoring to prevent hearing loss from occupational noise exposure. All employees who are exposed to noise levels that equal or exceed 85 dBA must participate in Evergreen's audiometric testing program and hearing conservation program.

AUDIOGRAM TESTING

All employees with the potential to be exposed at or above the time-weighted average of 85 dba over an 8-hour period are required to participate in annual hearing tests which includes:

- Taking a baseline test within 6 months of the employee's first exposure at or above the action level.
- Annual testing for employees who have the potential to be exposed at or above the time-weighted average of 85 dba over an 8-hour period any time during the year.
- Audiometric testing will be provided at no cost to employees.
- If a standard threshold shift (a drop in hearing ability of at least 10 decibels in three frequencies) is found, the following will commence:

i.If the employee does not normally wear hearing protection, hearing protection will be provided and mandatory.
ii.If the employee normally does wear hearing protection, they will be refitted and retrained.
iii.The employee will be referred to an audiologist for further evaluation.
·Employees will be provided with the results of their individual audiometric exams. If a standard threshold shift is found, employees will be notified in writing within 21 days of the determination.

TRAINING

Hearing protection training will occur upon hire and annually thereafter. Training will consist of the following elements:

- The effects of noise on hearing (including both occupations and non-occupational exposures.
- Instructions about selecting, fitting, using, and caring for hearing protection.
- The purpose and procedures for program evaluation including audiometric testing.
- Employee's rights to access records kept by the College.

NOISE MONITORING

Monitoring for noise exposure levels will be conducted or coordinated by The Office of Environmental Safety & Health. It is the responsibility of Department Supervisors to notify EHS when there is a possible need for monitoring.
Noise monitoring will be conducted whenever there is a change in equipment, processes, or controls that affect the noise levels.

HEARING PROTECTION

ACCEPTABLE FORMS OF HEARING PROTECTION

Ear plugs

Ear plugs have several advantages over ear muffs such as being lighter in weight, can be worn without interference from eyeglasses, headgear, earrings, or hair, are more comfortable in hot/humid environments, and are less expensive than ear muffs. There are several styles of earplugs, including flanged types and malleable foam.

When inserting earplugs:

- Before putting earplugs in, wash your hands to prevent infections from entering the ear.
- Inspect the earplugs for tears, cracks, or hardening.
- To insert a malleable foam plug, roll the plug between fingers and thumb to make it thinner. Reach one hand behind the head and pull the ear outward and upward to widen the auditory canal. Insert the plug well into the ear and hold it in place until it expands. If the seal is not tight, the earplug will not be effective.

Canal caps

Canal caps have flexible tips that act as caps that plug the ear canal. They do not extend into the ear canal, they only close the ear opening. Therefore they do not give you as much protection as ear plugs or ear muffs. Canal caps are ideal for situations where hearing protection must be taken on and off frequently. They are not designed for continuous, long-term wear. Insert canal caps much as you would ear plugs. Pull the outer ear up and back, then insert the tips of the caps into the ear, firmly pushing and wiggling them into place.

Ear muffs

Ear muffs are hearing protection devices that are worn over the head. Before you put on ear muffs, inspect them for cracks, tears, or other signs of wear. Remember that anything that comes between the ear and the ear muff will make them less effective and reduce the level of protection such as hair, glasses, etc. When putting on ear muffs center the ear muffs over your head and make sure the seal is tight. Adjust the headband so that the ear muffs are resting comfortably on your head. The cups should entirely cover the ear.

Maintenance & Care

Pre-formed earplugs and earmuffs should be washed periodically and stored in a clean area. Disposable foam inserts should be discarded after each use. Hands should be washed before handling pre-formed earplugs and foam inserts to prevent contaminants from being placed in the ear.

ENGINEERING CONTROLS

The Evergreen State College recognizes the desirability of controlling existing noise levels by engineering and/or administrative control. Therefore, the feasibility of such controls will be carefully considered. Due to various limitations, some noise levels cannot always be reduced below acceptable limits by the use of feasible engineering and administrative controls. Work practices may also be used to limit or minimize the impact of noise protection within the work area. Engineering, work, and administrative controls will be considered and implemented where feasible on a continuing basis.

PROGRAM EVALUATION & ADDRESSING DEFICIENCIES

The EHS office will evaluate the College's hearing loss prevention program periodically to assure its effectiveness. If a potential deficiency is found in our hearing loss prevention program, like an employee experiencing measurable hearing loss we will evaluate:

·Employee noise exposure measurements
·Noise controls in the work area
·Hearing protection and refitting employees as necessary
·Employee training on noise and use of hearing protection and retraining if necessary

HOT WORK & FIRE WATCH PROGRAM

Policy Overview

This program was designed and developed to help employees and contractors perform their work safely and prevent fires that can lead to loss of life and/or property. This program provides information in compliance with DOSH regulations as well as the 2015 International Fire Code and amendments thereof imposed by Washington State and Thurston County.

The Evergreen State College Hot Work Program applies to all operations within Facilities including alterations, maintenance, and campus operations.

TRAINING

All employees involved in hot work and/or designed as a fire watch will be trained on the following elements:

·The content of the Hot Work & Fire Watch Program
·Fire extinguisher operation
·Operation of hot work equipment
·Completion and review of hot work permit

HOT WORK

Hot work is any work involving an open flame, electric arc, or work that produces sparks and/or slag (this includes abrasive metal cutting and grinding. A hot work permit is required for any hot work performed inside of a building or within 35 feet of a building's exterior or exterior combustible material.

Qualifications

Individuals conducting hot work shall be capable of performing operations in a safe manner. Demonstration of working knowledge of the equipment being used, processes involved, and fire safety requirements will constitute acceptable evidence of compliance.

Protection

All personnel (employees, contractors, building occupants, etc.) must be suitably protected against hazards generated by the hot work (e.g. heat, sparks, fumes, welding rays, etc.). This may include but is not limited to, the use of personal protective equipment, fire blankets, shields, screens, or local exhaust ventilation.

Record keeping

Contractors conducting hot work will retain their portion of the hot work permit for at least 48 hours after the completion of hot work and will be made available upon request. Following the 48 hour period, the contractor portion will be submitted to EHS for record retention. EHS will retain all portions of the hot work permit for two years.

Signage

Areas, where hot work is being conducted, will have signage visibly posted at all access areas. The hot work permit will be posted in a visible area outside of the hot work area. Signage will at a minimum display the following:

CAUTION
HOT WORK IN PROGRESS
IN CASE OF FIRE CALL 911

RESPONSIBILITIES OF PARTIES

Department Supervisor

- Designate a responsible person(s) to oversee hot work.
- Issue hot work permit
- Ensure that all employees involved in hot work have received all required training prior to the start of work.
- Ensure hot work procedures are being implemented and followed

EHS

- EHS is responsible for the administration of this program. This includes updating program documents & forms, permit management, and ensuring that training content is relevant and up to date.

Employee

- Complete applicable training.
- Obtain a hot work permit prior to starting work.
- Follow hot work procedures.
- Ensure that all hot work equipment is in satisfactory operating condition and in good repair.
- Protect nearby personnel against heat, sparks, etc. when working in occupied buildings.
- Reach out to Supervisor or EHS if any part of the hot work program requirements are unclear

Fire Watch

- Watch for fire.
- Communicate an alarm.
- Call 911 or Police Services.
- Extinguish spot fires
- Must stay on watch for at least 30 minutes after hot work has been completed.

OUTSIDE CONTRACTOR WORK

The Evergreen Management official responsible for overseeing the project is responsible for ensuring that outside contractors follow the College's hot work requirements when working on the Evergreen campus.

HOT WORK PERMIT REVIEW

- A pre-hot work check will be conducted by the individual conducting the work and either the Maintenance Manager or Member of EHS. Upon completion of the permit and authorization of the Maintenance Manager or EHS work may begin.
- Hot work permits authorizing multiple days of hot work require daily inspections of the area by the permit authorizing party. The permit authorizing party will note inspection dates and findings on the hot work permit.
- Individuals conducting hot work under multi-day permits will review the permit each day prior to beginning work.

FIRE SAFETY REQUIREMENTS

Protection of combustibles

- All combustibles within 35 feet of the hot work being conducted will be removed or protected with non-combustible blankets, barriers, or partitions.
- Floors in hot work areas will be kept clean and clear of dust or other combustibles.
- Automatic sprinkler systems will not be shut off during hot work. If hot work is being conducted near sprinkler heads, non-combustible shields, guards, or damp cloth may be used to protect the head. These barriers must be removed at the conclusion of the hot work.
- Fire detection systems may be put into “test” to prevent accidental activation during hot work.

FIRE WATCH

- A continuous fire watch is required during and for a minimum of 30 minutes after the conclusion of any hot work.
- Fire watch personnel must be dedicated to the task of fire-watch. Fire watch personnel may assist by handing supplies or tools to the individual conducting hot work, but will not be placed in a position that they cannot readily observe and monitor the work being conducted (i.e. no holding materials in place, fastening, climbing ladders, etc.)
- A minimum 4A:20B:C fire extinguisher will be readily accessible by fire watch personnel at all times.
- Fire watch personnel will be made aware of the locations of fire protection equipment, including facility-provided fire extinguishers and manual pull stations prior to the beginning of hot work.
- After the conclusion of the hot work and post-work monitoring period may be required. Non-hot work continuing in the hot work area qualifies as adequate monitoring. If the area is not going to be continuously occupied for the post-work monitoring period, hourly checks must be performed.

REPORTING FIRE EMERGENCIES

All active fire and explosion emergencies must be reported immediately regardless of size and nature, by calling 911 and/or activating the fire alarm system.

*NOTE

Per McLane for non-residential buildings, in instances where a portion of the fire sprinkler system is down but the fire alarm system is still in working order, a fire watch is not required. However, communication of that situation should be made aware to Police Services and McLane Fire Department

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HOT WORK PERMIT

Hot work completed by: _____

Location (building & floor): _____

Work task: _____

Permit Activated: _____ Permit Expires: _____

Evergreen approval signature: _____

Contractor signature: _____

Requirements within 35 feet of hot work

Sprinkler protection in service	☐ Yes	☐ No
Fire extinguisher located in vicinity of work area	☐ Yes	☐ No
Flammable liquid, dust, lint & oily deposits removed and floor swept clean	☐ Yes	☐ No
Environment and nearby activities evaluated for conditions that could be effected by hot work	☐ Yes	☐ No
Path of spark trajectory evaluated	☐ Yes	☐ No
Remove combustible material where possible or protect with approved welding pads, blankets, curtains, or metal shields.	☐ Yes	☐ No
Wall and floor openings covered	☐ Yes	☐ No
Protect ducts that might carry sparks to distant combustible material	☐ Yes	☐ No

Hot work on walls, ceilings, or roofs

Construction is non-combustible and does not have combustible covering or insulation	☐ Yes	☐ No	☐ N/A
Combustible material on other side of walls, ceilings, or roofs are moved away	☐ Yes	☐ No	☐ N/A

Confined space hot work

~~(Separate entry permit required)~~

Adequate ventilation provided	☐ Yes	☐ No	☐ N/A
Air quality of space monitored	☐ Yes	☐ No	☐ N/A
Area purged of any flammable or toxic vapors	☐ Yes	☐ No	☐ N/A
Lock-out / tag-out required	☐ Yes	☐ No	☐ N/A

Work on enclosed equipment (tanks, pipes, etc)

Enclosed equipment cleaned of all combustible material	☐ Yes	☐ No	☐ N/A
Containers purged of flammable liquid/vapor	☐ Yes	☐ No	☐ N/A
Pressurized vessels, piping, and equipment removed from service, isolated and vented	☐ Yes	☐ No	☐ N/A
Lock-out / tag-out required	☐ Yes	☐ No	☐ N/A

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FIRE WATCH

Fire watch

Fire watch will be provided for a minimum of one hour after work has ceased ☐ Yes

Fire watch personnel has been provided with fire extinguisher and has been trained in its proper use ☐ Yes

Fire watch personnel have been trained on what to do in the case of a fire and/or emergency on site ☐ Yes

Special instructions _____

_____

_____

Designated fire watch personnel: _____

FIRE WATCH START

DATE	TIME	SIGNATURE

FIRE WATCH END

DATE	TIME	SIGNATURE

FIRE WATCH FORM

Duties of Fire Watch Personnel

A fire watch will consist of walking the building or assigned area to ensure monitoring of the fire and life safety conditions. Fire Watch Personnel are to review the interior and exterior of the building to familiarize themselves with the locations of all life safety and fire protection devices. Fire Watch Personnel must carry a cell phone at all times.

- Personnel shall walk the building or area assigned on an hourly basis looking for hazards.
- Check all rooms including those not normally occupied such as electrical, storage, and trash rooms.
- Check all exits to ensure that they are not blocked or locked.
- Identify and mitigate any potential issues that may cause or contribute to a fire.
- Maintain the Fire Watch Log that is attached.

Should an incident occur, the following steps must be taken immediately

- Notify Police Services immediately (360) 867-6832
- Notify any occupants that are in the building and begin evacuation
- If necessary and safe, use fire extinguisher to control fire
- Ensure you can evacuate the building safely
- Meet firefighting crews when they arrive on scene and direct them to the emergency

I understand my duties as a designated fire watch and confirm that I am able to carry out said duties:

Signature:_____. Date:

Signature:_____. Date:

Signature:_____. Date:

FIRE WATCH LOG

Log time on an hourly basis

DATE	TIME	SIGNATURE	COMMENTS
	1:00 AM		
	2:00 AM		
	3:00 AM		
	4:00 AM		
	5:00 AM		
	6:00 AM		
	7:00 AM		
	8:00 AM		
	9:00 AM		
	10:00 AM		
	11:00 AM		
	12:00 PM		
	1:00 PM		
	2:00 PM		
	3:00 PM		
	4:00 PM		
	5:00 PM		
	6:00 PM		
	7:00 PM		
	8:00 PM		
	9:00 PM		
	10:00 PM		
	11:00 PM		

DATE	TIME	SIGNATURE	COMMENTS
	12:00 AM		
	1:00 AM		
	2:00 AM		
	3:00 AM		
	4:00 AM		
	5:00 AM		
	6:00 AM		
	7:00 AM		
	8:00 AM		
	9:00 AM		
	10:00 AM		

JOB HAZARD ANALYSIS

Policy Overview

The use of a job hazard analysis allows the College and its employees to identify and address hazards on campus and implement strategies to effectively eliminate or manage the risks associated with any given job related task. The use of a job hazard analysis offers guidelines to conduct a step-by-step analysis of the task at hand and ensure that staff are thinking about and incorporating safety in the work that they do.

IMPLEMENTATION

Because environmental conditions, spaces, tools, methods, and staff have the potential to change, staff are required to fill out a job hazard analysis form before beginning work on a job. Items to be identified include:

Basic job information

- Who is conducting the work
- Job start date – job completion date/time
- Associated work order number.
- Location(s) of work
- Work summary

Personal protective equipment

- What PPE is needed?
- Does employee have appropriate weather-related clothing/equipment?

Asbestos

- If there is a potential for cutting or disturbing of material
- If disturbing material, has it been tested for asbestos?

Confined Space

- Will it include entering a confined space?
- If it is a confined space has EHS been notified, a permit been completed, a qualified attendant assigned, and has the space been monitored and provided with ventilated/forced air?

Lock out/tag out

- Does the work involve electrical?
- Has a lock out / tag out system been applied?
- Has the isolation of energy been verified before beginning work?
- Have affected employees been informed?

Fall protection

- Does the work require working at heights?
- Has a fall protection work plan been filled out?
- Has a correct fall protection system been implemented?
- Has fall protection equipment been properly inspected?

Painting

- Does the work involve painting or paint removal?
- Has the SDS been consulted before beginning work?
- Is the proper PPE being used per the SDS?
- Has the paint been tested for lead?

Lifts

- Does the task require the use of a lift?
- Has the lift been inspected?
- Has the lift checklist been filled out?
- Do users have the correct PPE?

Equipment

- Are equipment guards in place?
- Has the equipment been inspected before use?
- Is the equipment in good working order?
- Does employee have the proper equipment for the task?

Miscellaneous

- Has the employee been trained to conduct the work safely?
- Has the employee assessed the work area for hazards (environmental changes, noticeable hazards, people in the area, etc.)?

REVIEW

The Office of Environmental Safety & Health will conduct on-going reviews of submitted job hazard analysis forms and work with staff on hazardous items noted in their initial assessment of job assessments to improve safety processes and resolve any standing safety issues.

LADDER PROGRAM

Policy Overview

The Evergreen State College has developed a ladder safety program to safeguard employees that work with ladders. This program establishes training and standard procedures for all employees and is intended to prevent ladder-related incidents.

TRAINING

Employees will be provided with ladder training to recognize the hazards associated with ladder use and the procedures to minimize these hazards when hired or when deficiencies in ladder use are noted. Employees will specifically be trained on the following:

- The proper construction, use, placement, and care in handling ladders.
- Inspection of ladders.
- The maximum intended load capacities of ladders that are used.

INSPECTION

All ladders on campus are on an inspection schedule and will have a documented thorough inspection annually.

Before each use employees will inspect the following on ladders:

- Joints between rungs and side rails are tight.
- Rungs are not bent, missing, or broken.
- Side rails are not bent, broken, or split.
- All bolts are rivets are in place and secure.
- Hardware, fittings, and accessories are securely attached and working properly.
- Moveable parts operate freely.
- Safety feet are not excessively worn or damaged.
- Metal components are not corroded.
- Metal spreader or locking devices on step ladders are in place and functional
- Ladders have not been painted.

Modifications will not be made to any ladders. Any modifications made by anyone other than the manufacturer will result in the ladder being taken out of service.

REMOVAL OF SERVICE

A ladder found to have any defect will be tagged, removed from service immediately, and reported to the Department Supervisor.

SETTING UP LADDERS

When setting up a ladder, employees must ensure the following:

- That the right ladder is selected for the task.
- That ladders are set up in a location that won't be displaced by workplace activities or traffic.
- That the ladder has a secure footing on a firm and level support surface. If employees are unable to set up on a firm and level support surface then the ladder will be tied off to prevent displacement.
- That ladders are not placed on boxes, barrels, or other unstable bases to obtain additional height.

Extension Ladders

- Extension ladders must be set up at a safe angle. The formula for a proper angle is when the horizontal distance from the top support to the foot of the ladder is approximately ¼ the working length of the ladder's. Employees can verify this by facing the ladder with the employee's feet touching the feet of the ladder. With arms extended the employee's palms should rest on a rung at shoulder height.

Step Ladders

- Never use a step ladder in the closed and leaned position. Always make sure to fully open and engage the spreader arms.

CLIMBING LADDERS

- Employees must maintain three points of contact at all times when climbing and descending from ladders.
- Employees will not carry materials while climbing or descending ladders.
- Employees will face the ladder while climbing and descending.
- When getting off a ladder to access an upper-level employees will ensure that the ladder extends at least three rungs above the landing surface.

WORKING FROM LADDERS

- Employees will ensure that the ladder is not moved, shifted, or adjusted while being worked from.
- Employees will ensure not to extend their reach while working from a ladder. The center of the user's body should not extend past the side rails.
- If employees are working above 25 feet or require the use of both hands while on the ladder fall protection will be used.
- Only one employee is allowed on a ladder at a time.

LEAD PROGRAM

Policy Overview

Lead is a poison that may cause significant acute and chronic health effects if not used or handled safely. This program outlines the policies and procedures to protect employees from occupational lead exposure. This lead safety program will be used to manage lead-containing materials safely by incorporating engineering controls, safe work practices, and personal protective equipment to limit lead exposures to the lowest possible level.

TRAINING

Lead worker training

Employees who work under the supervision of the competent person on lead-related projects will receive lead worker training. This training will address the following:

- The content of WAC 296-62-07521
- The hazards of lead exposure including the nature of operations which could result in exposure to lead above the action level or permissible exposure limit (PEL)
- Routes of exposure
- Products that may contain lead
- Controlling lead exposure through controls, work practices, and PPE
- Signage
- Required PPE (including respirators and respirator program)
- Related medical programs and requirements
- ·Testing/monitoring procedures
- Procedures for removal of material and clean up
- Restriction on the use of chelating agents
- Employee's right to access of records

Lead awareness training

Employees who have the potential to be exposed to lead-containing materials but not significant amounts of lead dust will receive lead awareness training. The training will address the following:

- The hazards of lead exposure
- Campus-specific protocol when conducting demo/repair work as it relates to disturbing lead materials
- Products that may contain lead
- Health hazards of lead
- Routes of exposure
- Signage
- How to control lead exposure

Training for lead sample collections

Staff who collect samples for lead testing must have lead awareness training and be trained on Evergreen's lead program.

Staff collecting samples from RAD residential facilities or the Child Care Center must have a RRP certification.

RESPONSIBILITIES OF THE COMPETENT PERSON

- Perform work and direct lead-safe work practices
- Assist in providing on-the-job training to non-certified workers
- Collect samples for laboratory lead analysis
- Be physically present while posting signs, containing work areas, and cleaning work areas.
- Maintain containment to keep dust and debris within the work area
- Prepare and assist with the maintenance of lead-related records

RESPONSIBILITIES OF DEPARTMENT SUPERVISOR

- Ensure that the work area has been determined as lead-free before assigning work
- Coordinate with EHS and the competent person for lead sampling needs
- Ensure that all applicable parties involved with lead work are up to date on required training

RESPONSIBILITIES OF EHS

- Implement Evergreen's Lead Safety Program and ensure compliance with the requirements of the written program, applicable regulations, standards, and best practices.
- Ensure a qualified competent person oversees lead management projects.
- Ensure the proper execution of lead management practices
- Ensure that all applicable parties involved with lead work are up to date on required training
- Coordinate training when needed
- Assist in regulatory compliance by providing worksite assessments, exposure monitoring, waste disposal, and medical surveillance.
- Retain and maintain lead-related records

WORK PRACTICES FOR LEAD ABATEMENT

Testing for lead

A determination must be made whether or not the original coatings or materials contain lead. This may be done by:

- Submitting paint chips or pieces of the material to a laboratory vendor for analysis. When taking samples staff must ensure that the paint sample contains all layers of paint. A minimum sample size of about 0.5 to 1.0 grams (approx. a teaspoon) is required for analysis.
- Using self Lead Check swabs, is not an allowed or appropriate method.

Storage and disposal

Collected lead debris will be stored in labeled lead waste containers and secured at the end of each shift. Lead waste containers will be kept separate from non-lead waste containers. All lead waste will be disposed of in accordance with local, state, and federal requirements.

Lead work area

The lead work area will be marked with caution tape at least 20 feet around the lead work activities. Warning signs of sufficient size to be clearly legible will be displayed in the area.

Signage

Areas in which lead-related work is being performed will be marked off with barriers or barricades, signs, etc., as appropriate to minimize access and potential exposure. Signs must state the following:

WARNING
LEAD WORK AREA
POISON
NO SMOKING OR EATING

PERSONAL PROTECTIVE EQUIPMENT

Respiratory protection

When working with lead, respirators will be required for the following:

- When exposures exceed the permissible exposure limit
- When engineering or administrative controls do not reduce exposure below the permissible exposure limit
- When exposures have ben been assessed to be below the permissible exposure limit

When employees are utilizing respiratory protection, the guidelines set forth in Evergreen's Respiratory Protection Program will be followed.

Additional required PPE

Required personal protective equipment used for exposure to load includes:
·Disposable coveralls
·Head covers
·Disposable foot covers
·Disposable gloves
·Eye goggles
Protective clothing and equipment shall be replaced as necessary to maintain effectiveness.
Disposable PPE will be left on-site at the end of each work day and disposed of with demolition debris.

When working on ladders, during hot work, or when they otherwise create a greater hazard, the use of shoe coverlets may be discontinued provided that the employee's footwear is decontaminated when exiting the area by HEPA vacuum and/or wet washing. Employees are encouraged to change their shoes before leaving work even if their shoes have been decontaminated.

HYGIENE PRACTICES

Every effort will be made to prevent staff from spreading contamination to other areas of the workplace and from spreading contamination to their homes. The following facilities and practices will be provided and used:

Change rooms

When feasible, clean change rooms will be provided for storing personal clothing and other personal items. Provisions will be available in change rooms for separately storing clean and contaminated clothing. If a change room is not feasible, non-contaminated personal clothing will be stored in containers, vehicles, or other areas outside of the regulated area. When leaving the work area during the work shift, all personal protective equipment will be HEPA vacuumed, removed, and left outside of the entrance to the regulated area.

Employees will wash their hands and face before eating, drinking, or smoking.

Decontamination

Personal protective equipment will be HEPA vacuumed or wet washed before removal. Staff will wash their hands and face before entering vehicles to prevent contamination. Staff will shower and wash their hair at shower facilities as soon as possible.

General practices

- Protective gear, respirators, and tools will be decontaminated using a HEPA vacuum or wet methods.
- There will be no eating, drinking, smoking, chewing tobacco, or gum when working with lead.
- Compressed air may not be used as a decontamination method.
- Contaminated clothing must be stored in appropriate containers labeled with the proper warning labels.

Housekeeping practices

Housekeeping practices will include, but are not limited to, the following:

- All surfaces will be maintained reasonably free of accumulations of lead. The lead work area will be inspected for visible lead debris at the end of each shift.
- Vacuum work surfaces with a HEPA vacuum as needed during the work shift and at the end of the day to remove lead dust that may have accumulated. Shoveling and wet sweeping may only be used where HEPA vacuuming has been found to be ineffective.

MEDICAL

Medical Surveillance

Initial monitoring consisting of tests for blood lead and zinc protoporphyrin levels will be provided to staff performing lead work. Continuing blood lead level monitoring will be made available to staff who are or who have the potential to be exposed at or above permissible exposure limited for 30 or more days per year.

- OSHA set a Permissible Exposure Limit (PEL) for lead in workplace air of 50 μg/m3 (8-hour time-weighted average).
- OSHA mandates periodic determination of BLL for those exposed to air concentrations at or above the action level of 30 μg/m3 for more than 30 days per year.
- The employee must be notified in writing within 15 days after the receipt of the results or any monitoring performed and provided with a medical examination if a BLL is found to be greater than 40 μg/dL.

Because employees are not engaged in lead-related activities for more than 30 days in any 12-month period, it is not expected that they would be exposed to lead at or above the action level for more than 30 days per year.

Medical Removal

An employee will be removed from the job if their blood level is 30μg/m3 or greater. When an employee is removed, or otherwise limited, they will be assigned a task that will not result in exposure to lead at or above the action level of 30μg/m3. The employee may return to their former assignment when a qualified physician determines that the employee is no longer at to exposure to lead or when the employee's blood level is less than 25μg/m3.

Record Keeping

Exposure monitoring records

Lead exposure monitoring records will be kept for the duration of employment plus 30 years

Medical surveillance records

Lead medical surveillance records will be kept for the duration of employment plus 30 years

Negative exposure assessment information

Any objective data used to determine exemptions from initial monitoring or any other data used to show negative exposure assessments will be kept for 30 years

Notification

When the EHS Office or any other group responsible for notification receives results of air monitoring, biological monitoring, or medical findings, the employee will be notified of the results within 5 working days.

MONITORING

Exposure assessment

There will be initial monitoring of employees who may be exposed to airborne concentrations of lead at or above the action level. Monitoring will be representative of a full shift. The frequency of monitoring will be in accordance with WAC 296-62-07521(5). If the exposure assessment results indicate employee exposure to lead at or above 50 μg/m3, EHS will modify engineering controls and work practices as necessary to reduce exposure below the PEL. After modifications have been made, EHS will perform additional monitoring to determine the effectiveness of the modifications.
Additional air monitoring will be conducted when there is a change in process, type of material disturbed, control methods, work practices, or environmental conditions that could result in additional exposures. Employees will be notified of the results of all monitoring within 5 working days after EHS's receipt of the air monitoring results.

Exposure monitoring representative of the current project conducted within the past 12 months or appropriate objective data that demonstrates that there is no chance for overexposure may be used to satisfy the initial exposure determination requirement. Contact the Office of Environmental Safety & Health to determine if previous monitoring or existing data meets these requirements.

Environmental release monitoring

To verify that detectable levels of airborne lead are not being released to the environment outside of the designated work area, visual observations in conjunction with air monitoring and sampling will be conducted by the Competent Person. The Competent Person will be on-site at the start of work and continually throughout the work day. At a minimum, daily observations will be made at least every two hours during active lead removal activities.

Visual observations

Observations will be made at the perimeter of the active work zone to verify no visible emissions are leaving the work zone. If visible emissions are observed, The Facilities Manager and EHS will be notified immediately to evaluate control measures. Work will be postponed until changes have been made to eliminate visible emissions from leaving the work zone.

CONTROLS FOR EXPOSURES EXCEEDING THE ACTION LIMIT

Work that may cause exposures to exceed or likely to exceed the PEL of 50 μg/m3 is recommended to be performed by qualified contractors due to additional requirements for air monitoring, medical surveillance, and engineering controls. These high-risk activities are not typically performed, and if so, should be performed by properly trained and equipped lead workers. Short-term work may be acceptable, determined by a competent person, as long as effective controls are implemented to minimize potential exposures. EHS along with The Facilities Manager and Competent Person will assess the project scope and determine when a certified contractor is necessary to complete the work.

PRE-TASK HAZARD ASSESSMENT MEETING

Before work begins, a meeting will be held to inform all employees of the hazards associated with the project, the controls to be implemented to minimize exposure to employees, and to fill out the lead work plan form. This lead compliance program will be reviewed with each employee prior to the beginning of the job. Copies of the completed form will be available upon request.

The department supervisor for each maintenance project must determine whether the tasks involved will disturb lead-containing Material. The Department Supervisor and Competent Person are responsible for ensuring that lead-containing materials are handled so as not to pose a health hazard to College employees. The Competent Person, Department Supervisor, and EHS shall review and approve the lead work plan prior to the start of work.

LEAD WORK PLAN

Department	Location (building, room)
Description of Work	
Type and Quantity of Lead Containing Material (LCM)	
% of lead in material(s)	Sample Source: ☐ Employee ☐ Consultant ☐ Other

Project schedule	Expected start date	Expected completion date

- **Workers must review and sign this Lead Work Plan prior to starting work. Workers must understand this plan and be trained in lead work practices and the systems and equipment that will be used.**
- **Address other hazards relevant to the work by following specific program requirements for those hazards.**
- **Post this Lead Work Plan at the worksite for the duration of work activities.**
- **If any of the project conditions change, revise the work plan to address the changes.**

1. Tools and equipment used that will disturb LCM (check all that apply)			
☐	Paint scraper	☐	Rotohammer with HEPA vacuum dust attachment
☐	Hand trowel	☐	Power saw
☐	Pry bars	☐	Grinder
☐	Hammer	☐	Drill
☐	Pressure washer (1000 to 1500 psi)	☐	Wire brush
☐	Scraper	☐	Mechanical lifting device
☐	Soldering Iron	☐	Other:
☐	Welding equipment	☐	Other:
☐	Torch	☐	Other:
2. Precautions for warning and protecting building occupants or others			
☐	Post lead warning sign(s) around worksite perimeter	☐	Review any SDS of chemical used with employees prior to start of project and provide copy on the job site
☐	Close off work area to public	☐	Other:
☐	Notify building coordinator of work schedule and provide copy of Lead Work Plan Name: Date/Time	☐	Other:
3. Safe work procedures (include controls and work practices to minimize employee exposures)			
☐	Interior locations: Erect a sealed containment structure to isolate lead contaminated materials from entering occupied areas when working inside. Provide negative air exhaust ventilation with HEPA filters.	☐	Use local exhaust ventilation when cutting, soldering, torching or welding lead containing materials.
☐	Exterior Location: Tape plastic sheeting below work area to catch debris and prevent from contaminating equipment, soil or entering storm or sanitary sewer conveyance systems.	☐	Wipe off walls with damp rags

☐	Provide portable tools with dust collection shrouds and connect to vacuum systems with HEPA filtration.	☐	Use shaving cream or sponge method when drilling into building materials
☐	HEPA Vacuum (do not use compressed air)	☐	Rotate workers to reduce exposure time
☐	Wet mist debris before collection	☐	Other:
☐	For pressure washing, place catch mat below work area and seal all storm drains. Cover vegetation as much as possible.	☐	Other:
4. Personal Protective Equipment			
☐	Respirator Type: Cartridge:	☐	Safety glasses/goggles
☐	Coveralls	☐	Disposable hood
☐	Shoe covers	☐	Other:
☐	Gloves	☐	Other:
5. Air Monitoring			
☐	Arrange air monitoring with EH&S	☐	Previous air monitoring has shown that employee exposures are below the AL for this work
☐	Personal Exposure	☐	Clearance Sampling
☐	Area Monitoring	☐	Other:
☐	Air monitoring results	☐	Other:

6. Employee(s) trained to work under this plan						
Name (print)	**Current Training** (within last year)					
	☐	Lead awareness	☐	Lead worker	☐	Respiratory protection
	☐	Lead awareness	☐	Lead worker	☐	Respiratory protection
	☐	Lead awareness	☐	Lead worker	☐	Respiratory protection
	☐	Lead awareness	☐	Lead worker	☐	Respiratory protection
	☐	Lead awareness	☐	Lead worker	☐	Respiratory protection

7. Clean up procedures			
☐	HEPA vacuum	☐	Remove contaminated clothing/PPE before exiting worksite.
☐	Clean equipment with soap and water or other effective cleaning agent	☐	HEPA vacuum any debris from plastic, roll plastic and tape ends closed and seal in 6 mil plastic bags.
☐	Clean and disinfect respirator	☐	Tape ends of HEPA vacuum hoses when not in use. Return to designated storage room when finished.
☐	Remove all disposable contaminated clothing and package for waste disposal	☐	Conduct surface sampling for lead using recommended surface contamination limit of: µg/ft^2
☐	Wash hands and face with soap and water before exiting work area.	☐	Other:
☐	Remove all contaminated clothing/PPE before leaving containment. Place in double sealed bags and label.	☐	Other:
8. Disposal			
☐	Attach waste disposal instructions provided by EH&S Environmental Programs	☐	Recycle lead materials as follows:
☐	Label containers/bags with hazardous waste labels.	☐	Other:
☐		☐	Other:

9. Work plan approval(s): By signing below, I certify that all required precautions including, but not limited to, wearing of proper protective equipment and clothing, participation in a medical surveillance program if necessary, and following the procedures referenced above will be followed during this project. These employees have received appropriate training in the tasks to be performed and understand the risks associated with working with lead-containing material.		
Name of project manager, supervisor, or lead	**Signature**	**Date**
10. Reviewed by Competent Person* (name)		

*Project manager, supervisor, or lead may also be the Competent Person, if they meet the definition of a Competent Person.

11. Employee(s) have reviewed and understand the work under this lead work plan		
Name (print)	**Signature**	**Date**

LEAD PAINT CHIP SAMPLING PROCEDURES

MATERIALS & EQUIPMENT

- Paint chip sample collection container
- Paper funnel for paint chip sample collection tray
- Duct tape
- Pen or Sharpie
- Cutting and scraping tools including: razor knife, razor blades, paint scraper, putty knife, chisel
- Trash bags
- Required PPE
- Collection form

PREPARATION

- Fill out collection report
- Label collection container with sample number which will be the work order plus numerical instance
- Set up sample collection tray

I. For horizontal surfaces – Use a sheet of paper for making a funnel for the sample collection.

II. For vertical surfaces:
a) Center a piece of tape along one of the long edges of a clean sheet of paper.
b) Stick the paper directly below the location to be sampled with the taped edge closest to the scored location.
c) Pull the lower two corners of the paper together and overlap slightly to form a funnel. Secure with a piece of tape.
d) Fold the bottom of the newly formed funnel up and use a piece of tape to close off the funnel bottom. Be sure no sticky tape surfaces are exposed on the inside of the funnel.

III. For overhead horizontal Surfaces (painted surfaces facing down):
a) Make a closed-bottom funnel in the same manner as for vertical surfaces.
b) Affix the funnel to the painted surface in a way so that it is directly under the location to be sampled without impeding access to the surface, or attach the funnel to a ladder beneath the sample location

OUTLINE THE COLLECTION AREA

- Using a cutting tool or a pen, score/outline a 1x1 inch square.
- Using a cutting tool, peel the paint chip sample from the substrate by sliding the blade along the score and underneath the paint chip sample.
- If problems are encountered in removing the paint chip sample, use a scraping tool or another equivalent tool to aid in the pain chip sample removal.

Only one paint chip needs to be taken for each testing combination. Additional samples can be collected as a quality control measure, if desired.

TRANSFERRING SAMPLE FROM COLLECTION TRY TO SAMPLE CONTAINER

- Remove the sample collection tray from the sampling location. Be careful to avoid any sample spillage.
- Carefully tap all of the collected sample debris into the sample collection container.
- Seal the sample collection container.
- Dispose of sampling tray in trash bag.
- Dispose of collection tray.

FINAL STEPS

- Clean all cutting tools used during sample collection with a wet wipe.
- Submit the paint chip sample for lead analysis to the laboratory.

COMPLETING THE NVL LAB FORM

- Fill out contact info on top of the form (company name, address, etc.)
- For project name/number fill in with " (Evergreen work order number) – Pb"
- For project location, fill in location where sample was taken (ex: CAB, SEM II A, Evans Hall) and include any other pertinent identifiers such as floor, room number, etc.
- In box selection section check the following: FAA
- In reporting instructions check the email box and list Taylor.Slaughter@Evergreen.edu as the reporting email.
- Identify the total number of samples taken for that location.
- For sample ID list each sample as the work order plus the numerical instance (ex: 1000045 – 1, 100045 -2, 1000045 – 3, etc.).
- For description fill in with general location identifier (ex: north bathroom wall, east ceiling corner by light fixture, etc.)
- Fill out Sampled by section with your information.
- When filling out the date/time portion fill in what time it was mailed or when you handed it off to the next person.
- If sample is given to anyone else (excluding the mailroom) before it is mailed, the additional person needs to fill out and sign the Relinquish by section.

MAILING THE SAMPLE

- Go to the mailroom and consult with the mail staff as to what type of package the sample and paperwork should be mailed in and how fast you would like it mailed out.
- If multiple work orders go out (i.e. 6 samples for the CRC, 4 samples for Evans Hall, 7 for the CUP, etc.) separate each location and put each work order bundle of samples in their own mailing envelope and then compile all location envelopes into one large mailer to go out.
- Mailing of lead samples should be charged to the appropriate org #
- Mail out samples with corresponding sample paperwork

LIFT PROGRAM

Policy Overview

The purpose of this policy is to outline the safety activities that will be performed when operating aerial platforms and scissor lifts. This policy applies to all Evergreen State College-owned or rented aerial platforms and scissor lifts and employees who use them.

TRAINING

Operator

No employee is allowed to operate or ride in a lift until they have been trained and certified as an authorized user. Training will cover the following

- General instruction on the inspection, application, and operation of lifts.
- Purpose and use of manuals.
- Prestart inspection.
- Responsibilities associated with problems and malfunctions affecting the operation of the lift.
- Factors affecting stability.
- Purpose of place cards and decals.
- Workplace survey.
- Pertinent safety rules.
- Authorization to operate a lift.
- Operator warnings and instructions.
- Location of lift manuals.
- Purpose and function of all controls.
- Safety devices.
- Operating characteristics of specific lifts.

In addition to instruction, employees are required to conduct a hands-on proficiency test on each specific model of lift they will be using before they will be certified for lift use.

Ground Personnel

Staff acting as ground personnel must receive training that covers the following:

Roles and responsibilities of ground personnel

- Must be in the vicinity and have a visual of the operator at all times.
- Must ensure that the operator does not approach any drop-off or environmental hazards.
- Must keep the public out of the work area.
- Will work with the operator to ensure proper PPE is worn and lift user checklist is filled out.
- What to do in an emergency situation.
- Machine-specific training of ground controls.

INSPECTIONS

PRE-START

Lift operators will conduct a daily pre-start inspection of the lift to be used before commencing in lift operations. Operators will ensure the following:

- Working conditions of operating controls, mechanisms, and electrical systems.
- Operational visual and audible safety devices
- No leaks in hydraulic or pneumatic systems
- No damage to the body of the lift
- Good condition of tires and wheels
- Operation and safety stickers are in place
- Locking devices and other fasteners are in place.

If any deficiencies are noted, the machine will be tagged out of service and the Department Supervisor and EHS Safety Manager will be notified.

ENVIRONMENTAL SURVEY

The lift operator must survey the work area before starting lift operations. The Operator should note the following circumstances and mitigate the hazards accordingly:

•Loose / non-compacted dirt
• Drop-offs and/or break in elevation
•Floor obstructions
•Debris
•Overhead obstructions
•Electrical conductors
•Weather conditions
•Persons in the area

ANNUAL INSPECTIONS

All lifts will be inspected on an annual basis by a qualified mechanic. Any deficiencies found must be repaired before the lift is to be put back into service.

Inspection and repair records will be maintained and kept on file for 4 years. Inspection and repair records will notate all of the following:

•Date of inspection
•Deficiencies found
•Corrective action taken
•Name of inspector
•Repairs made
•Date of repair
•Description of work
•Name of mechanic conducting repair

OPERATIONS

While operating in lifts, employees will adhere to the following:

- Employees are required to fill out a pre-use checklist before commencing work and will have it available for EHS review.
- When conducting lift work employees will work in pairs (one operator, one ground employee).
- Utilize fall protection when working from ALL lifts. Occupants will attach their lanyard(s) to the manufacturer's recommended attachment point or to the platform itself if not specified by the manufacturer. Occupants WILL NOT attach their lanyard(s) to an adjacent pole, structure, or equipment.
- Ensure when used, outriggers are placed on pads or a solid surface.
- Install wheel chocks when working on an incline.
- Do not raise the platform in windy or gusty conditions.
- Do not exceed load limits established by the manufacturer.
- Do not stand or climb guardrails.
- Do not use items such as ladders, buckets, etc. to gain additional height in the lift.
- Do not alter or disable safety devices.
- If the Operator suspects a malfunction or encounters a potentially unsafe condition they must cease operation, report the issue to the Department Supervisor and EHS Safety Manager, and tag the lift out of service until the issue can be resolved.
- When working from lifts, employees will utilize chin-strap helmets.
- If employees will be exposed to overhead hazards while working from lifts, hard hats must be worn.

the evergreen state college

LIFT USE CHECKLIST

	PERSONAL PROTECTIVE EQUIPMENT	YES	NO
1.	Chin strap helmet		
2.	Hard hat for overhead hazards		
3.	Fall ***restraint*** lanyard		
4.	Method of communication (radio, cell phone)		
5.	Safety glasses (if using power tools)		

	PRE-INSPECTION OF LIFT	YES	NO
1.	Working condition of controls, mechanisms, and electrical systems are good		
2.	Visual and audio alarms are in working order		
3.	Hydraulic or pneumatic leaks		
4.	Damage to body of lift		
5.	Tires and wheels in good condition		
6.	Warning and operational stickers in place		
7.	Locking devices and fasteners in place		

	ENVIRONMENTAL SURVEY	YES	NO
1.	Loose or non-compacted dirt		
2.	Drop off / break in elevation		
3.	Floor obstructions		
4.	Debris		
5.	Overhead obstructions		
6.	Electrical conductors		
7.	Poor weather conditions (wind gusts, etc.)		
8.	Unauthorized persons in area		

WORK AREA: _____.

SIGNATURE(S): _____.

DATE: _____.

LIFT OPERATOR PERFORMANCE TEST

Specific lift type:
Operator:
Evaluator:
Date:

X = Satisfactory 0 = Unsatisfactory N/A = Not applicable

Pre-use equipment inspection:
- ☐ Air/hydraulic/fuel leaks
- ☐ Loose/missing parts
- ☐ Tires/ wheels
- ☐ Warning stickers in place
- ☐ Outriggers

Worksite inspection:
- ☐ Looks to identify drop-offs, holes, slopes, floor obstructions, overhead obstructions, electrical hazards, inadequate surface to withstand load force, wind/weather conditions, presence of bystanders, and other safety hazards.

Function test of lower control station:
- ☐ Ensures lower controls are in working order

Fall Protection equipment:
- ☐ Inspects fall protection equipment before use
- ☐ Dons equipment properly
- ☐ Attaches to appropriate anchor point

Function test of platform:
- ☐ Ensures that platform controls are in working order

Drive, Creep, and Reverse:
- ☐ Operator to move approximately 10 feet in driving mode and creep approximately 5 feet. Verifies unit balance and stability

Turn vehicle 360 degrees right and left:
- ☐ Minimum disturbance of platform
- ☐ Verifies unit balance and stability

Boom up and down, in and out:
- ☐ Fully extend in and out
- ☐ Fully raise up and down

Rotate/swing boom 360 degrees in each direction:
- ☐ Minimal disturbance of platform
- ☐ Verifies unit balance and stability

Tilt platform in each direction:

- ☐ Minimal disturbance of platform
- ☐ Verifies unit balance and stability

Turn off machine using emergency stop function:

- ☐ Can locate and use emergency stop function

Park and shut down lift:

- ☐ Minimal disturbance of platform
- ☐ Verifies unit balance and stability

Deploy and set up outriggers:

- ☐ Able to accurately set up outriggers

Comments:

_____.

_____.

_____.

_____.

_____.

_____.

_____.

LOCK OUT/TAG OUT PROGRAM

Policy Overview

The purpose of this program is to establish a written Lock Out/Tag Out policy and procedure document to use and train employees in the safe handling of hazardous energy, to ensure that adequate procedures are used for affixing appropriate lockout and tag out devices to energy isolating equipment, and to otherwise disable machines, equipment or systems to prevent unexpected energization, start-up, or release of stored energy in order to prevent injury.

*Note that this policy does not apply when work on a cord and plug-connected electric equipment for which exposure to the hazards of unexpected energization or startup of the equipment is controlled by the unplugging of the equipment from the energy source and by the plug being under exclusive control of the employee.

RESPONSIBILITY

All levels of management will comply with and enforce all aspects of this program.

Supervisors are responsible for ensuring that authorized and affected employees receive training in energy control procedures.

Employees are to understand that violations of lockout procedures constitute a serious safety threat to themselves and others and that any violation of the lockout/tagout program may result in disciplinary action.

The Environmental Safety & Health Office is responsible for providing assistance in the development and implementation of training and procedures.

TRAINING

Implementation of the lock-out/tag-out program will be performed only by trained and authorized employees. Every authorized and/or affected employee who has the potential to be exposed to energy sources that require the use of lock out/tag out will be trained in the proper procedures of this program before engaging in any such work that would require lock out/tag out. This training will ensure that the purpose, function, and procedures of the energy control program are understood by employees and that the knowledge and skills required for the safe application, usage, and removal of energy control devices are acquired.

Each affected and authorized employee will be trained on:

- The purpose and function of the energy control program
- The type and magnitude of energy available in the workplace
- Recognition of the hazardous energy sources that apply
- Methods and means to isolate and control energy

Affected employees whose work operations are or may be in the area where energy control procedures are utilized will be instructed about the procedures of the lock out / tag out system and about the zero-tolerance policy relating to unauthorized attempts to restart or re-energize machines, equipment, or systems which have been locked/tagged out.

Retraining

Retraining will be provided for all authorized and affected employees whenever there is a change in their job assignments, a change in machines, equipment, systems, or processes that present new hazards, or when there is a change in energy control procedures.

Retraining shall re-establish employee proficiency and introduce new or revised control methods and procedures as necessary.

Addition retraining will also be conducted whenever a periodical inspection reveals or when management has reason to believe that there are deviations from or inadequacies in the employee's knowledge or use of energy control procedures.

The EHS Safety Manager will certify that employee training has been completed and is up to date.

Annual Audits

Authorized employees will be audited annually by management to ensure that there are no deviations from or inadequacies in the employee's knowledge or use of energy control procedures as outlined in TESC's lock out/tag out program.

The EHS Safety manager will certify that the audit has been performed and notate:

- The employee performing the lock out
- The equipment locked out
- The person performing the audit
- The date of audit

GENERAL LOCK OUT PROCEDURES

Please note that the following is only a general overview of lock out procedures. Each individual machine and/or equipment has specific lock out procedures that can be found in the appendix of this program. Be sure to consult and adhere to equipment/machine-specific procedures when performing lock out.

Initiating a lock out

1. Notify all affected employees that you are about to start a lock out/ tag out procedure.
2. Locate all (electrical, hydraulic, pneumatic, stored) energy sources that provide power to the equipment you will be working on.
3. Shut down the equipment by following the normal method for shutdown.
4. Isolate all energy sources to the equipment.
5. Turn the equipment switch back on to confirm that the power source has been blocked out from the equipment.
6. Attempt to restart the equipment to ensure that the power source has been isolated.
7. Return all switches to the off position.
8. Using a personal lock out device, lock out all energy sources to the equipment and install a tag out device. Tags will display:

·Commands such as "DO NOT OPERATE"

·Name of the person who is conducting the shutdown

·Date of shutdown

9. With the lock out device in place, test the disconnect to insure it cannot be turned on.
10. Make sure that all equipment involved is at zero energy state having all energy sources properly locked out to the point at which all stored and/or inherent energy has been released or sufficiently blocked.
11. Test the equipment to assure that any and all active stored energy has been blocked and/or released.

Ending a lock out

1. After maintenance or repairs have been completed, the employee who applied the lock out device will ensure that the equipment is safe to re-energize and operate. Locks, tags, and safety devices may be removed for testing or adjusting of the equipment but will be reinstalled if all work has not been completed.

2. When repairs are completed all guards and safety devices shall be reinstalled, all tools removed from the area, and all operating switches will be in the off or shut down position before removing the lock out device.
3. Notify those affected of the intention to reconnect all energy sources.
4. If the individual who applied the lock out device is not available to remove them when the repairs are complete every reasonable means will be made to contact that individual and the EHS Manager and Department Supervisor will be consulted. If the equipment must be restored, the lock out device can only be removed by the Department Supervisor and EHS Manager together with another journey level employee who is familiar with the equipment being restored. As soon as possible upon return to work, the employee whose lock was removed will be informed of the lock removal and the reasons why.
5. Reconnect all sources of energy.
6. Restart and test equipment for proper operation.
7. Inform all affected employees that the equipment is back in service.

SPECIAL LOCK OUT PROCEDURES

Cord & plug connected equipment

Equipment powered by a cord and plug (with no additional power source such as pneumatic, hydraulic, or stored energy) inserted into an electrical outlet receptacle are to be disconnected from the receptacle during maintenance and service activities. The plug will be under the exclusive control of the authorized person performing the maintenance or service activity.

Group lock outs

On occasion, more than one individual might be required to Lock Out and work on the same equipment. Prior to commencing work on any equipment requiring a Group Lock Out the Department Supervisor will appoint one employee to be the "Designated Employee" for that work assignment. The Designated Employee will fill out the appropriate Group Lock Out form and ensure that Group Lock Out procedures are followed. The Designated Employee's lock shall be the first lock applied to any group lock out device and the last one removed. The Designated Employee must participate as one member of the Lock Out team. Each person entering the job shall sign and date the Group Lock Out form and place his/her personal lock on the group lock out device. Each person will sign and date again before removing their lock.If the work is not completed at the end of the work shift the Designated Employee will leave their lock out device installed.

When a system of a group lock out is implemented the following procedure will be followed:

1. The Department Supervisor will assign one employee to be the designated employee for that work assignment.

2. The Supervisor will ensure that all employees involved in the group lock out, sign, and date the group lock out form.
3. Each employee involved will apply their own lock to the multiple lock out device.
4. Employees will follow steps 1 – 11 above for initiating a lock out.
5. After maintenance or repairs have been completed the Designed Employee will ensure that the equipment is safe to re-energize and operate. Locks, tags, and safety devices may be removed for testing or adjusting of the equipment but will be reinstalled if all work has not been completed.
6. When repairs are completed, all guards and safety devices will be reinstalled, all tools removed from the area, and all operating switches will be in the off or shut down position before removing lock out/tag out devices.
7. Notify those affected of the intention to reconnect all energy sources.
8. Remove all lock out devices. The last lock out device removed will be that belonging to the Designated Employee.
9. Reconnect all sources of energy.
10. The Designated Employee will restart and test the equipment for proper operation.
11. Inform those affected that the equipment is back in service.

Equipment testing

In situations when locks must be temporarily removed from lockout devices and the equipment energized to test or position equipment components the following sequence of steps are to be followed;

1. Clear the equipment of all tools and materials.

2. Make sure that all affected employees are clear of the machine.
3. The authorized employees remove their locks and tags and go to a safe position.
4. Energize the equipment and proceed with testing or positioning.

De-energize the equipment following the general lockout or specific lockout procedures before continuing any maintenance or service activities

Non-user lock removal

If an employee leaves the worksite without removing their lock from a lockout device and the equipment must be returned to service, the following procedures are to be followed:

1. The employee's Supervisor is to verify that the authorized employee is not at the facility.

2. All reasonable efforts are to be made to contact the employee who applied the device to inform them that their lock has been removed.
3. The Supervisor will assure that the authorized employee has been informed that their lock has been removed before the employee resumes work on site.
4. The Supervisor is to inform and receive approval from EHS before the lock is removed.

LOCKOUTS INVOLVING CONTRACTORS

Any time a contractor is conducting work in conjunction with Evergreen staff, a group lock out will be initiated with both Evergreen and contractor personnel applying their own lock.

ANNUAL LOCK OUT/TAG OUT EVALUATION

Operator:
Inspection conducted by:
Equipment type and identification:
Date of evaluation:
Sources of energy:

	Yes/No
1. Employee has received training on equipment-specific LO/TO procedures	☐☐
2. Employee correctly shuts down equipment	☐☐
3. Employee identifies and isolates all energy sources	☐☐
4. Employee attaches LO/TO device correctly	☐☐
5. If applicable, employee correctly uses group LO/TO device	☐☐
6. Employee effectively releases stored or blocked energy	☐☐
7. Employee attempts to restart or operate equipment prior to beginning	☐☐
8. Employee identifies unique hazards	☐☐
9. Employee follows appropriate LO/TO device removal & start up procedures	☐☐
10. Employee has standard lock out devices that are consistent with all other lockout Devices in shape, color, or size	☐☐
11. Employee has the sole key used to operate lockout devices	☐☐
12. Employees lock out devices are in good condition and operate correctly	☐☐
13. Employee is provided with an adequate amount of lock out and tag out devices	☐☐
14. Demonstrates proficient knowledge of LO/TO procedures & policy	☐☐

Describe any deficiencies requiring corrective action:

GROUP LOCK OUT FORM

Designated Employee: _____ Date:_____

Is responsible for all employees working under this Lock Out work assignment and associated work. He/she shall ensure compliance with the Lock Out procedures, maintaining this form and returning this form to his or her supervisor.

Supervisor/Lead: _____ Date:_____

Equipment to be Locked Out:

_____

_____

_____

_____

Location of Equipment:

_____

_____

_____

_____

Employees participating in Lock Out

Employee Name:	Lock Applied (date/time)		Lock Removed (date/time)		Contact number

Designate Sign-Off: _____ Date:_____

Supervisor Sign-Off:_____ Date:_____

OUTDOOR HEAT EXPOSURE PROGRAM

Policy Overview

The purpose of this policy is to provide the necessary information to recognize, assess, and control outdoor heat exposure in an effort to prevent heat stress-related injuries and illnesses on campus. Staff are exposed to and regulated under this policy annually from May-September.

OUTDOOR HEAT EXPOSURE ACTION LEVELS

Outdoor heat poses a risk depending on the protective clothing and other personal protective equipment that is required for certain worksites. With that in mind, two action levels have been designated when the outdoor heat exposure program in in effect. These action levels are found in Table 1

Table 1

Nonbreathable clothes including vapor barrier clothing or PPE such as chemical resistant suits	52°F
All other clothing	80°F

TRAINING

All staff and their supervisors will receive outdoor heat exposure training prior to outdoor work and at least annually after the initial training. Training topics will consist of:

·The environmental factors that contribute to the risk of heat-related illness.
·General awareness of personal factors that may increase susceptibility to heat-related illness.
·Campus procedure for providing staff with sufficient means to reduce body temperature.
·The importance of removing heat-retaining PPE.
·The importance of frequent consumption of drinking water.
·The importance of taking preventative cool down rest periods when needed.
·The mandatory cool down rests periods when the temperature reaches 90° F
·The location and the process to access shade or other sufficient means to reduce body temperature.
·The importance of acclimatization including: frequent cool down rest periods, a gradual increase of work duration, and employees' inability to build a tolerance during a heat wave.
·The different types of heat-related illnesses and the common signs/symptoms of heat-related illness.
·The importance of immediately reporting signs or symptoms and the procedures staff must follow including appropriate emergency response procedures.
· The procedures for close observation of employees for signs and symptoms of heat-related illness.

Supervisors will receive additional training annually on the following:

·The importance of considering engineering controls (air conditioning) and administrative controls (scheduling during cooler hours) in order to reduce heat-related illness.
·The procedures for if an employee exhibits signs/symptoms consistent with heat-related illness, including first aid and emergency response procedures.
·The procedures for moving/transporting staff to an area emergency medical services can reach, if necessary.

COOL-DOWN AREA

When staff are exposed to outdoor temperatures (beyond incidental exposure) at or above these listed in Table 1, supervisors will ensure staff have access to a cool-down rest area that is as close as practical to where the work is occurring. This may include:

- An airconditioned structure or
- Shade that does not adjoin a radiant heat source and must be able to fully accommodate all individuals requiring access.
- Alternative cool-down methods may be used, but they must be shown to be equally effective at reducing body heat and must be approved by The Office of Environmental Safety & Health.

DRINKING WATER

When staff are exposed to outdoor temperatures (beyond incidental exposure) at or above those listed in Table 1, supervisors will ensure staff have access to suitably cool drinking water and have an opportunity to drink at least one quart of drinking water per hour.

ACCLIMATIZATION

Supervisors must closely observe staff for signs and symptoms of heat-related illness for 14 days when staff are newly assigned to work at or above the temperatures in Table 1 or when staff have returned to work after a seven-day or more absence. Supervisors must also closely observe staff for signs and symptoms of heat-related illness during a heat wave due to rapid acclimatization being impossible during these times of increased temperature.

HIGH HEAT PROCEDURES

(High heat is when temperatures are at or exceed 90° F)

In circumstances where temperatures reach or exceed 90° F, the following will be ensured:

- Staff will be monitored for symptoms of heat-related illness. Monitoring may consist of regular communication via phone or radio, a mandatory buddy system, or other effective means approved by the Office of Environmental Safety & Health.

Staff must take at minimum the mandatory cool-down rest periods in Table 2

Table 2

Air Temperature	Mandatory cool-down rest period
At or above 90°F	10 minutes/2 hours
At or above 100°F	15 minutes/1 hour

EMPLOYER AND EMPLOYEE RESPONSIBILITY

When employees are exposed to outdoor temperatures (beyond incidential exposure) at or above those listed in Table 1, the employer must:

- Encourage staff to frequently consume water or other acceptable beverages to ensure hydration and encourage/allow staff to take a preventative cool-down rest period when they feel the need to do so to protect themselves from overheating. The rest period will be paid unless taken during a meal period.

Employees are responsible for monitoring themselves for heat-related illness and taking action to prevent this through the consumption of water and taking preventative cool-down rest periods as needed.

FACTORS AFFECTING HEAT EXPOSURE

Ambient Temperature

This is the naturally occurring temperature. When working indoors, heating, ventilation, and air conditioning systems can be used to control the temperature and limit the risk of heat or cold-related illness and injuries. Working in conditions of temperature extremes outdoors requires the implementation of other types of controls to limit the risk of illness or injury

Relative Humidity

This is the ratio of the actual amount of moisture in the air compared to the amount of moisture that could hold if completely saturated at the same temperature. Elevated relative humidity levels increase the sensed temperature impact; cold temperatures feel colder and hot temperatures feel hotter when humidity levels are elevated above 60%.

Work Activity

As employees expend more energy, the body's internal metabolic heat production rises. This increases stress on the cardiovascular system to regulate body temperature. Work-related factors that influence head stress include work rate, level of physical effort, and duration of activity.

Clothing

Clothing adds insulation to the body. During hot weather, layers of clothing will increase the level of discomfort and increase the risk of suffering heat-related illness or injury. Selecting the appropriate clothing for the anticipated work activity will reduce the probability of the occurrence of these incidents. Other factors that may increase the risk of heat-related disorders include additional equipment, the use of a respirator, or other PPE.

Personal Characteristics

Characteristics such as age, weight, previous heat stress injury, underlying medical conditions, medication use, and overall health and physical fitness contribute to an employee's susceptibility to contracting a heat-related illness.

TYPES OF HEAT-RELATED ILLNESS

Heat Exhaustion

Heat exhaustion is a heat-related illness that can occur after you have been to high temperatures, and is often accompanied by dehydration. There are two types of heat exhaustion:

·Water depletion – signs include: excessive thirst, weakness, headache, and loss of consciousness.

·Salt depletion – signs include: nausea and vomiting, muscle cramps, and dizziness.

Without proper intervention, heat exhaustion can progress to heat stroke, which can damage the brain and other vital organs, and potentially lead to death.

Symptoms of heat exhaustion include:

- Confusion
- Dark-colored urine
- Dizziness/fainting
- Fatigue
- Headache
- Muscle cramps
- Nausea, vomiting, and/or diarrhea
- Pale skin
- Profuse sweating
- Rapid heartbeat

Heat Stroke

Heat stroke is the most severe form of heat illness and is a life-threatening emergency. It is the result of long, extreme exposure to the sun. In this case, a person does not sweat enough to lower body temperature.

Symptoms of heat stroke include:

·Headache

·Dizziness

·Disorientation, agitation, or confusion

·Sluggishness or fatigue

·Seizure

·Hot, dry skin that is flushed but not sweaty

·High body temperature

·Lack of sweating

·Loss of consciousness

·Rapid heartbeat

·Hallucinations

PREVENTION

Heat-related illnesses are predictable and preventable. The following steps can be taken to ensure that staff are not exposed to a heat-related illness.

- Wear loose-fitting, lightweight clothing. Wearing excess clothing or clothing that fits tightly won't allow the body to cool properly.
- Protect against sunburn. Sunburn affects your body's ability to cool itself, so protect yourself outdoors with a wide–brimmed hat and sunglasses and use a broad-spectrum sunscreen with an SPF of at least 15. Apply sunscreen generously, and re-apply every 2 hours or more often if you are sweating.
- Drink plenty of fluids. Staying hydrated will help your body sweat and maintain a normal body temperature.
- Take it easy during the hottest parts of the day. If you can't avoid strenuous activity in hot weather, drink fluids and rest frequently in a cool spot. Try to schedule physical labor and activities for cooler parts of the day, such as early in the morning.
- Get acclimated. Limit time spent working or physical exertion in heat until you're conditioned to it. People who are not used to hot weather are especially susceptible to heat-related illness. It takes several weeks for your body to adjust to hot weather.
- Be cautious if you're at increased risk. If you take medication or have a condition that increases your risk of heat-related problems, avoid the heat and act quickly if you notice symptoms of overheating

HYDRATION

Encourage staff to stay hydrated. Staff should be drinking at least one cup of water every 15-20 minutes. Don't wait to be thirsty to drink water and don't drink it all at once. It's best to start drinking water before work. Drink small amounts often throughout the day to stay hydrated. Electrolyte-enhanced sports are ok but not recommended as they typically contain a high amount of sugar. It's important to limit the intake of sugar and caffeine as they can enhance dehydration.

EMERGENCY PROCEDURES

If you observe yourself or anyone else expressing signs of heat exhaustion or heat stroke take immediate action. Call 911 and attempt to cool the individual by:

·Getting the individual in an air-conditioned space or in the shade

- Removing excess clothing
- Cooling the individual by any means available such as: Putting in a cool tub of water or a cool shower, spraying with a hose, sponge with cool water, fan while misting with cool water, placing ice packs and/or wet towels on the individuals head, neck, armpits, and groin.
- Never leave an individual who is experiencing heat-related problems alone, as things could get worse.

FOLLOW UP

If anyone experiences a heat-related injury or illness an accident report should be filled out and submitted to the EHS office.

RESPIRATORY PROTECTION PROGRAM

Policy Overview

Evergreen's Respiratory Protection Program exists to support the protection of employees from exposure to respiratory hazards, to ensure compliance with applicable occupational safety and health standards, and to provide requirements for the proper selection and use of respiratory protection equipment. Evergreen recognizes that when respirators are used as specified, they can prevent injury and illnesses from both acute and chronic exposures to hazardous substances.

RESPIRATOR TRAINING

The Respirator Program Administrator will provide training to respirator users, designated fit testers, and those who maintain respiratory protection equipment as needed.

Employees will be trained on the use, care, responsibilities, and expectations of respirator use before using a respirator. Retraining will occur annually or if there are any deficiencies noted with employee use.

Training will cover the following elements:

- Respiratory hazards and the signs and symptoms of exposure.
- How the respirator provides protection by filtration, absorption, or supplied air.

·Limitations of the respirator.

- How improper fit, use, or maintenance can make the respirator ineffective.

·How to properly inspect the respirator.

- How to put on, perform a seal check, use, and remove the respirator.
- How to clean, disinfect, store, and/or discard respirators
- Instruction on what to do if the respirator fails.
- Medical signs and symptoms that may limit or prevent the effective use of respirators.
- General requirements as outlined in the WAC respirator standard
- Employee demonstration of their understanding of information covered in the training through a hands-on evaluation.

RECORD KEEPING

The following records will be kept in the EHS Office in written or electronic form:

- A copy of the written respirator program
- Employees' latest fit-testing results
- Employee training records
- Written recommendations from the medical provider

MEDICAL EVALUATIONS

Every designated employee will be provided with a medical evaluation before they are allowed to use a respirator. Employees will fill out the medical questionnaire found in Appendix A of this program. Once filled out the questionnaire will be given to a medical provider for review. Completed questionnaires are confidential and will be sent directly to the medical provider without review by management. If the medical questionnaire indicated to the medical provider that a further medical exam is required, this will be provided at no cost to the employee. The medical provider will then establish a recommendation on whether or not the employee is medically able to wear a respirator.

Additional medical evaluations will be required in the following situations;

- The medical provider recommends it.
- Evergreen's Respirator Program Administrator deems it necessary.
- Employee exhibits signs of breathing difficulty.
- Changes in work conditions that increase employees' physical stress.

FIT TESTING

All employees who wear tight-fitting respirators will be fit-tested using their respirator or given a new one. Fit testing will be repeated annually. Fit-testing will also be conducted when a different respirator facepiece is chosen, when there is a physical change in an employee's face that would affect it, or when the employee or medical provider notify Evergreen EHS that the fit is unacceptable. No beards are allowed on users of tight-fitting respirators. Evergreen conducts fit testing using the irritant smoke protocol.

RESPIRATOR USE

The Program Administrator will monitor the work area in order to be aware of changing conditions where employees are using respirators. The Program Administrator will also ensure that the NIOSH labels and color-coding on respirator filters and cartridges remain readable and intact for and during use.

Employees will not be allowed to wear respirators with tight-fitting face pieces if they have facial hair, absence of normally worn dentures, facial deformities (i.e. scars, deep skin creases, prominent cheekbones, etc.), or other facial features that interfere with the face piece seal or valve function. Jewelry or headgear that projects under the facepiece is also not allowed. If corrective glasses or other personal protective equipment is worn, it will not interfere with the seal of the face piece to the face.

A seal check will be performed every time a tight-fitting respirator is donned. Employees will leave the area where respirators are required for any of the following reasons:

- To replace filters or cartridges
- When the employee can smell or taste a chemical inside the respirator
- When the employee notices a change in breathing resistance
- To adjust the respirator
- To wash face or respirator

SELECTING RESPIRATORS

The selection of a respirator must be appropriate to the contaminant, its concentration, and the level of protection provided by the respirator.

Half-face respirator

Half-face respirators cover the nose and the mouth. They have removable cartridges that filter out either dust, chemicals, or both. Selecting the correct cartridges is essential since they are designed for particular types of chemicals or dust. These cartridges are typically removable and sometimes interchangeable. Cartridges are available for solvents, ammonia, chlorine, acids, and other chemicals. The cartridges must be changed out or replaced periodically, especially for chemicals, since they can absorb only so much contaminant before a breakthrough occurs. A few cartridges are equipped with end-of-service indicators that show when a cartridge should be replaced. Most cartridges don't have this indicator and you must develop a change out schedule to prevent a breakthrough. The change-out schedule is based on the chemical concentration, physical work effort, temperature, and humidity.

Full face air purifying respirator

In some situations, you may need or want to use full-face respirators. This type of respirator is used with the air contaminant irritates the eyes. They also provide somewhat higher protection to the lungs since they tend to fit tighter and are less prone to leaking. These respirators also have replaceable cartridges that must be changed on a regular basis as described above for half-face respirators.

Filtering facepieces

These simple disposable dust masks are designed only for dust. They are not as protective as other respirators, but do an adequate job in many cases, unless the dust is really toxic or copious.

Table 6
Requirements for Selecting Air-purifying Respirators

If the contaminant is a:	Then
Gas or vapor 	Provide a respirator with canisters or cartridges equipped with a NIOSH-certified, end-of-service-life indicator (ESLI) (*note: there just a few of these)* **or** If a canister or cartridge with an ESLI is **not** available, develop a cartridge change schedule to make sure the canisters or cartridges are replaced before they are no longer effective (*note: most cartridge respirators fit in this category)* **or** Select an air-supplying respirator
Particle, such as a dust, spray, mist, fog, fume, or aerosol 	Select respirators with filters certified to be at least 95% efficient by NIOSH. For example, N95s, R99s, P100s, or High Efficiency Particulate Air filters (HEPA) **Or** You may select respirators NIOSH certified as "dust and mist," "dust, fume, or mist," or "pesticides." You can only use these respirators if particles primarily have a mass median aerodynamic diameter of at least 2 micrometers *Note: These latter respirators are no longer sold for occupational use, but some employers may still be using them.*

75SCL

Label Color: Olive

Defender™ Multi-Purpose Cartridge: Organic Vapor, Ammonia, Methylamine, Formaldehyde and Acid Gas (Chlorine, Hydrogen Chloride, Sulfur Dioxide, Hydrogen Sulfide, Hydrogen Fluoride, Chlorine Dioxide)

N75001L

Label Color: Black

Organic Vapor Cartridge

N75002L

Label Color: White

Acid Gas (Chlorine, Hydrogen Chloride, Sulfur Dioxide, Hydrogen Fluoride, Chlorine Dioxide) and Formaldehyde Cartridge

N75003L

Label Color: Yellow

Organic Vapor and Acid Gas (Chlorine, Hydrogen Chloride, Sulfur Dioxide, Hydrogen Fluoride, Chlorine Dioxide) Cartridge

N75004L

Label Color: Green

Ammonia and Methylamine Cartridge

N750052L

Label Color: Olive

Mercury Vapor and Chlorine Cartridge with End-of-Service-Life-Indicator (ESLI) for Mercury Vapor

75SCP100L

Label Color: Olive and Magenta

Defender™ Multi-Purpose Cartridge and P100 Particulate Filter: Organic Vapor, Ammonia, Methylamine, Formaldehyde and Acid Gas (Chlorine, Hydrogen Chloride, Sulfur Dioxide,Hydrogen Sulfide, Hydrogen Fluoride, Chlorine Dioxide) with a P100 particulate filter (99.97% minimum filter efficiency) for all particulates

7581P100L

Label Color: Black and Magenta

Organic Vapor Cartridge with a P100 Particulate Filter (99.97% minimum filter efficiency) for all particulates

7582P100L

Label Color: White and Magenta

Acid Gas (Chlorine, Hydrogen Chloride, Sulfur Dioxide, Hydrogen Fluoride, Chlorine Dioxide) and Formaldehyde Cartridge with a P100 Particulate Filter (99.97% minimum filter efficiency) for all particulates

7583P100L

Label Color: Yellow and Magenta

Organic Vapor and Acid Gas (Chlorine, Hydrogen Chloride, Sulfur Dioxide, Hydrogen Fluoride, Chlorine Dioxide) Cartridge with a P100 Particulate Filter (99.97% minimum filter efficiency) for all particulates.

7584P100L

Label Color: Green and Magenta

Ammonia and Methylamine Cartridge with a P100 Particulate Filter (99.97% minimum filter efficiency) for all particulates

75852P100L

Label Color: Olive and Magenta

Mercury Vapor and Chlorine Cartridge with End-of-Service-Life-Indicator (ESLI) for Mercury Vapor, with a P100 Particulate Filter (99.97% minimum filter efficiency) for all particulates

7580P100

Color: Magenta

P100 Particulate Filter (99.97% minimum filter efficiency) for all particulates

75FFP100

Color: Magenta

"Pancake": Low Profile P100 Particulate Filter (99.97% minimum filter efficiency) for all particulates

7535FFP100

Color: Magenta

"Pancake" Filter Assembly. Low Profile P100 Particulate Filter (99.97% minimum filter efficiency) for all particulates. Filter Assembly includes 5 pair 75FFP100 and 1 pair N750035 adapters for use with air-purifying gas and vapor cartridges (except Defender)

75FFP100NL

Color: Magenta

"Pancake" with odor relief: Low Profile P100 Particulate Filter (99.97% minimum filter efficiency) for all particulates; with odor relief from nuisance levels of organic vapors, acid gases and ozone

RESPIRATOR FIT TEST PROCEDURE

Procedure Overview

DO NO USE A TEST ENCLOSURE OR HOOD FOR THIS TEST

This is a qualitative fit test (QLFT) procedure. During this test, an employee is exposed to irritating smoke containing hydrochloric acid produced by a stannic chloride ventilation smoke tube to detect leakage. The smoke will irritate the eyes, lungs, and nasal passages. Employee sensitivity varies, and certain employees may respond more intensely than others exposed to irritant smoke. The individual conducting the fit test must take precautions to minimize the employee's exposure to irritant smoke. Conduct fit testing in an area with adequate ventilation to prevent exposure of the individual conducting the fit test and the build-up of irritant smoke in the ambient air.

SCREENING & TEST PREPARATIONS

Important: Sensitivity screening is necessary to determine whether the employee can detect a weak concentration of irritant smoke and whether any gross facepiece leakage is detected.

Preparations:

- Obtain only stannic chloride (ventilation) smoke tubes, and an aspirator squeeze bulb OR use a low-flow air pump set to deliver 200 milliliters of airflow per minute.
- Equip the employee's chosen respirator with P100 series filters if a negative pressure air purifying respirator will be tested. If a powered air-purifying respirator (PAPR) will be tested equip the respirator with high-efficiency particulate air (HEPA) filters.

Important: When performing sensitivity screening checks use only the minimum amount of smoke necessary to elicit a response from the employee

SCREENING

- Advise the employee that the smoke can be irritating to eyes, lungs, and nasal passages and instruct the employee to keep their eyes closed while exposed.
- Break both ends of the ventilation smoke tube and fit a short piece of plastic tubing, for example, 2 -6 inches of tygon tubing, over one end to prevent exposure to the sharp end of the tube. Connect the other end to an aspirator bulb or a low-flow air pump set to deliver a flow of 200 ml per minute.
- While the employee is not wearing a respirator, have the employee smell a weak concentration of irritant smoke to become familiar with its irritating properties. Carefully direct a small amount of irritant smoke toward the employee.

TEST

- Have the employee attach respirator filters, put on, adjust, and seal check the respirator without assistance. The employee must be proficient at these tasks.
- Remind the employee to keep their eyes closed during testing.
- Direct a stream of irritant smoke toward the respirator's face seal area as follows:
- Begin at least 12 inches from the face piece and move the smoke around the whole perimeter of the mask.
- Gradually make two more passes around the perimeter of the face piece, moving to within 6 inches of the respirator.
- Stop at any time the employee detects smoke in the facepiece. If this occurs a different respirator will need to be chosen and tested, beginning with sensitivity screening.
- Have the employee perform appropriate fit test exercises (see addendum below). If the employee has not had any involuntary response such as evidence of coughing, flinching, or other response, or detected smoke in the face piece continue to direct smoke from a distance of 6 inches around the face piece perimeter. If smoke is detected at any time the test has failed. A different respirator must be chosen and tested, starting with sensitivity screening. If no smoke is detected proceed to step 10.
- Have the employee remove the respirator and perform another sensitivity screen check as follows:
- Continue to use the smoke tube used for fit testing.
- Carefully direct a small amount of irritant smoke toward the employee.
- The test has been PASSED if the employee responds to the smoke
- The test is VOIDED if the employee does not respond to the smoke.

FIT TEST EXERCISES ADDENDUM

This list applies when you use any fit test. Employees tested must perform ALL exercises marked with an "X" as described for the fit-test procedure used. Once the exercises begin, any adjustments made void the test and you must begin again. After test exercises are completed, you must ask the employee about the comfort of the respirator. If it has become unacceptable, have the employee choose another one for testing. When the controlled pressure procedure is used, stop and repeat the test if the employee adjusts the respirator or takes a breath and fails to hold it for 10 seconds.

Description of Required Fit-Test Exercises	Qualitative Procedures	Quantitative Procedures; **EXCEPT** the **CNPP**	Controlled Negative Pressure Procedure (CNPP)
Normal breathing Breathe normally, while standing for one minute	X	X	
Deep breathing Breathe slowly and deeply while standing for one minute Take caution to avoid hyperventilating	X	X	
Head side to side Slowly turn head from side to side while standing for one minute, pausing at each extreme position to inhale Be careful to **NOT** bump the respirator	X	X	
Talking Talk slowly and loud enough to be heard clearly by the individual conducting fit testing for one minute. Choose **ONE** of the following: Read from a prepared text such as the Rainbow Passage[1] Count backward from 100 Recite a memorized poem or song.	X	X	
Grimace Smile or frown for fifteen seconds.		X	
Bending over	X	X	

Description of Required Fit-Test Exercises	Qualitative Procedures	Quantitative Procedures; **EXCEPT** the **CNPP**	Controlled Negative Pressure Procedure (CNPP)
Bend over to touch toes while standing. Repeat at a comfortable pace for one minute **OR** Jog in place for one minute if the test enclosure, such as a hood, does not permit bending over			
Normal breathing Breathe normally while standing for one minute	X	X	
Face forward **Premeasurement activity:** Stand and breath normally, without talking, for 30 seconds **Measurement position:** Face forward while holding breath for 10 seconds			X
Face forward **Premeasurement activity:** Stand and breath normally, without talking, for 30 seconds **Measurement position:** Face forward while holding breath for 10 seconds			X
Bending over **Premeasurement activity:** While standing, bend at the waist, as if to touch toes **Measurement position:** Hold the bending position with face parallel to the floor while holding breath for 10 seconds			X
Head shaking **Premeasurement activity:** Vigorously shake head from side to side for about 3 seconds while shouting **Measurement position:** Face forward, while holding breath for 10 seconds			X
Redon-1 **Premeasurement activity:** Loosen all facepiece straps and remove the respirator completely, then put it back on **Measurement position:** Face forward while holding breath for 10 seconds			X
Redon-2 Repeat the premeasurement activity and measurement position described in Redon-1			X

RODENT & PEST CONTROL PROGRAM

Policy Overview

hantavirus pulmonary syndrome (rodent-associated) and Cryptococcosis/Histoplasmosis/Psittacosis (bird and bat-associated) diseases are uncommon but severe diseases that can occur after contact with an infected pest or pest-infested area. This program establishes training and standard procedures for all affected employees and is intended to prevent pest-related hazards.

HANTAVIRUS (RODENT EXPOSURE)

ROUTES OF EXPOSURE

Hantavirus is spread primarily by deer mice. Mice spread hantavirus in their droppings, urine, saliva, and nesting material. The virus attaches itself to dust particles that can become airborne if disturbed. The infects humans by inhalation of the virus-contaminated dust or by close contact with contaminated material. Hantavirus can also be transmitted to humans through bites.

SYMPTOMS OF HANTAVIRUS

Symptoms of Hantavirus Pulmonary Syndrome typically begin 1-6 weeks after inhaling the virus. Symptoms are usually apparent within 2-6 days and include flu-like symptoms such as fever, sore muscles, headaches, nausea, vomiting, and fatigue. If left untreated it can become a serious infection, causing shortness of breath due to fluid-filled lungs. Hospital care is required.

CLEAN UP

- Use rubber, latex, or vinyl gloves. In instances of severe infestations respirators may be required.
- In instances of severe infestations before cleaning, it is best to ventilate the space by opening doors and windows.
- Do not sweep, vacuum, or generate airborne dust when droppings or nesting material are found.
- Thoroughly wet contaminated areas with a bleach solution (1.5 cups bleach in 1 gallon of water) or disinfectant and let soak for 5 minutes.
- Swipe up contaminated materials with a damp towel then mop or sponge the area with bleach solution or disinfectant.
- Steam clean or shampoo upholstered furniture and carpets if you see any urine or droppings on them.
- Spray dead rodents with disinfectant, then double bag. Throw out rodent in appropriate waste disposal system.
- Disinfect gloves with disinfectant before removing.
- Thoroughly wash hand with warm water and soap.

INFESTATIONS IN VEHICLES

Rodents may construct their nests in cars, trucks, vans, and other vehicles, especially if such vehicles are used infrequently. Rodent nesting material can be found in many areas of a vehicle including:

- The engine compartment, including in-engine compartment insulation
- The ducting and air filtration components of a vehicle's heating and air conditioning system
- The trunk of a car, including the spare tire compartment
- The passenger compartment, including the headliner, glovebox, and in or under the seats.
- Tool compartments
- Taillight and headlight access areas and enclosures.

Engine Compartment

While the car is in a well-ventilated space, open the hood to allow the engine compartment to air out for 20 minutes. Also, open vehicle doors and the trunk to facilitate airing out. Wearing proper PPE, inspect the engine compartment for evidence of nest building. Accumulations of nesting materials could occur anywhere but are frequently found between the battery and vehicle frame, in the area near the window wiper motors, and underneath air intake ducting or within the air filter.

Areas of the vehicle with evidence of rodent activity should be thoroughly disinfected and cleaned to reduce the likelihood of exposure to hantavirus-contaminated materials.

To avoid generating potentially infectious aerosols, do not use a vacuum cleaner or sweep rodent urine, droppings, or contaminated surfaces. Also, do not use power wash high-pressure sprayers to soak or dislodge nests of droppings.

Remove cables from the battery to reduce the likelihood of getting shocked while cleaning out the nesting material.

Passenger Compartment

Infectious virus particles blowing onto passengers through the air vents can pose a risk to people who use the vehicle so it is important to conduct a thorough cleaning.

Rodents may travel through the vehicle's air intake system, building nests on top of the accordion-style filters or in hoses and ducts leading directly to the passenger compartment. For engine compartment air filters, open the unit to reveal the filter. If you see evidence of rodent activity, spray with bleach solution or disinfectant. Spray the materials until fully soaked and let sit for 5 minutes. Then, remove both the nesting materials and the air filter, and discard them in the garbage. Insert the new replacement filter, and close the unit.

Inspection, disinfection, and possible replacement of hoses, ductwork, other filters, fan, or other components of the system may be necessary if the rodent infestation is extensive.

PREVENTION

- Keep rodents out of the area by plugging, screening, or covering all openings that rodents might get through (¼ inch wide or larger).
- Discourage rodents by eliminating food and water sources. This includes storing food in containers with tight-fitting covers, fixing leaky pipes, and storing garbage in tight containers, and disposing of promptly.
- After being notified of an infestation, EHS will coordinate with the contracted pest control vendor to set up traps in the area.

CRYPTOCOCCOSIS, HISTOPLASMOSIS, PSITTACOSIS (BIRD & BAT EXPOSURE)

Routes of exposure

Exposure to these diseases occurs when the spores are inhaled. Therefore, individuals who work in or clean up areas heavily contaminated with droppings may become exposed when the material is disturbed or dust is created.

Symptoms

- Cryptococcosis – Meningitis, severe headache, mental disturbances, fever, blurred vision, and cough.
- Histoplasmosis – Respiratory symptoms, general malaise, fever, chest pains, and a dry non-productive cough.
- Psittacosis – Low-grade fever that progressively gets worse, sore throat, light sensitivity, and severe headache

Clean up

Proper disinfection of a site is important to kill all disease agents so they no longer pose a danger. Never sweep, vacuum, or disturb droppings. Only wet cleaning methods are recommended when cleaning contaminated areas.

- Use rubber, latex, or vinyl gloves. In instances of severe infestations respirators may be required.
- Mix a disinfectant solution of 1 part bleach to 10 parts water.
- Spray down the area and ensure a thorough soak.
- After droppings are thoroughly wet, clean them up with a mop, sponge, or rag that has also been soaked in the disinfectant solution.
- Place the contaminated material in a plastic bag and seal it. Place this sealed bag into a second trash bag, seal it, and dispose of it in the regular trash.
- Disinfect or throw away PPE.
- Wash hands thoroughly with warm water and soap.

SCAFFOLD PROGRAM

Policy Overview

The Evergreen State College has developed the scaffold safety program to safeguard employees that erect and work from scaffold. This program establishes training and standard procedures for all affected employees and is intended to prevent scaffold-related incidents.

TRAINING

Scaffold erection

Evergreen will designate select personnel who will be trained as competent persons and who will be trained in the assembly and dismantling of scaffold. This training will consist of:

·Hazards in the work area and how to deal with them

·The correct procedures for erecting, disassembling, moving, operating, repairing, inspecting, and maintaining the type of scaffold being used.

·The design criteria, maximum intended load-carrying capacity, and intended use of the scaffold.

·All other applicable elements that apply to WAC 296-874 for scaffolding

Scaffold user

The EHS office in conjunction with competent persons for scaffolding will be responsible for ensuring training for scaffold users. Training for users will include:

- Hazard recognition of the hazards associated with the type of scaffold employees are using and the procedures to control or minimize said hazards.
- Electrical hazards
- Fall hazards
- Falling object hazards
- How to erect, maintain, and dissemble the fall protection and falling object protection systems being used.
- How to use the scaffold
- How to handle materials on the scaffold
- The load-carrying capacity and maximum intended load of the scaffold
- All other applicable elements that apply to WAC 296-874 for scaffolding

COMPETENT PERSONS

Evergreen will select designed persons to be competent persons for matters related to scaffold. Individuals who are competent persons are capable of identifying existing and predictable hazards in the surroundings or working conditions that are hazardous to employees and have the authority to take prompt corrective measures to eliminate them.

INSPECTIONS

Scaffolding is to be inspected and documented by a competent person before each work shift and after any incident which could affect the structural integrity.

The competent person will conduct the initial inspection using Evergreen's scaffold inspection checklist contained within this program. Subsequent daily inspections covering the same items will be noted on the tag attached to the scaffold.

If the competent person identifies that any part of the scaffold is damaged or weakened beyond capacity, the scaffold will be red tagged, the damaged portion removed, and EHS notified.

FALL PROTECTION

When employees are working from scaffold and exposed to a fall height of 10 feet or more fall protection will be utilized. Employees will either use a rope and harness system tied off to an appropriate anchor or a scaffold guardrail system with a top rail, mid rail, and toe board will be installed. Any employee not utilizing fall protection while exposed to a fall height of 10 feet or more will be subject to immediate disciplinary action.

MOVING ON A MOBILE SCAFFOLD

Mobile scaffolds will not be moved horizontally while employees are on them unless all of the following conditions are met and have been verified by the competent person:

- Each affected employee will be made aware of the move.
- The scaffold is braved by cross, horizontal, or diagonal braces, or a combination thereof to prevent collapse. The scaffold shall be plumb, level, and squared and all brace members secured.
- Scaffold casters and wheels are secured to scaffold legs.
- Scaffold will be stabilized to prevent tipping during movement.
- The surface from which the scaffold is being moved with within 3 degrees of level and free from pits, dips, holes, and/or other obstructions.
- The height-to-base ratio is two to one or less during movement.
- When the move is complete, casters and wheels will be locked to prevent movement in the stationary position.

GENERAL SAFETY ITEMS

- Do not attempt to gain access to a scaffold by climbing on it (unless it is specifically designed for climbing). Always use a scaffold ladder.
- Scaffold plans must extend over their end supports not less than 6 inches but no more than 12 inches.
- Scaffold platforms must be at least 18 inches wide.
- All scaffolds must be fully planked.
- All scaffolds must have solid footing.
- Do not alter any scaffold component by welding, cutting, drilling, or bending. Any scaffold component found to be altered must be immediately taken out of service.
- Scaffold use is prohibited if there is presence of ice or snow or during weather events such as storms or high winds.
- Makeshift devices such as boxes, buckets, etc will not be used to increase working heights on a scaffold. General use ladders (extension, step, self-supporting) will also not be used on scaffolds to increase working height.
- No scaffold will be erected closer than 15 feet to an overhead power line.

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GROUP LOCK OUT FORM

Initial daily scaffold inspection checklist

(Return to EHS office after completion)

	Yes/No
1. Has the competent person be in charge of the scaffold during erection?	☐☐
2. Is the frame spacing and sill size capable of carrying intended load?	☐☐
3. Are scaffold components and planking in safe condition?	☐☐
4. Are sills properly placed and appropriate material used to level scaffold?	☐☐
5. Is guardrail in place on all open sides?	☐☐
6. Has proper access be provided (ladders, trap doors, swing gates)?	☐☐
7. Are toe boards installed?	☐☐
8. Are scaffold frames and braces compatible?	☐☐
9. Are platforms fully planked?	☐☐
10. Does plank have minimum 12" overlap and extend 6" beyond supports?	☐☐
11. Are platforms clear of unnecessary material and debris?	☐☐
12. Is scaffold tagged and tagged appropriately?	☐☐
13. Have scaffold components been illegally modified?	☐☐
14. Is scaffold free of makeshift devices or ladders to increase height	☐☐
15. Is the supporting surface capable of withstanding the weight of the scaffold?	☐☐
16. Is the scaffold able to withstand the loads to be imposed on it?	☐☐

Competent Person:_____.

Date:_____.

SPILL CONTROL PROGRAM

Policy Overview

A spill is a release of a substance that may cause harm to the environment. The sooner a spill is reported, the quicker it can be addressed, resulting in less harm. Consider what to do in the event of a spill before starting a project. Spills may cause serious health and environmental problems if not handled correctly. Familiarity with chemical hazards and proper spill control measures will help minimize the effects of a spill.

CLEANING UP A SPILL

Stop the source

After the spill is confined, shut down the source. Stopping the source will reduce the overall impact of the spill, provide a safer working environment for responders and allow for a quicker, more effective response.

Confine the spill

Create a barrier around the outside of the spill area with spill socks. This will keep the spill from spreading and lessen the impact on the environment. Place the socks a few inches outside of the spill area to give yourself time to dike the perimeter and prevent the spill from saturating the barrier and breaking through. For spills on water, spill booms should be placed downstream from the spill's origin. Position them with enough slack to allow them to float freely and for liquids to collect behind them.
Sock or boom ends should be overlapped about 4"–6" to the inside of the spill flow. When the flow of the liquid is heavy or the terrain is uneven or sloped, you may need multiple layers of socks or booms to create an effective barrier.

Cleaning up the spill

Use the absorbent mats, pillows, or loose absorbent in the kit to clean up, working from the outside to the inside of the spill. Use mats for quick absorbency, maximum spill coverage, and for wiping up any residue that may be left on the surface. Use pillows to soak up larger volumes of liquids.

Disposing of spill clean-up material

Please all spill material and contents into spill kit buckets and coordinate for transport to the hazardous waste shed.

GENERAL PROCEDURE FOR SMALL MAINTENANCE SPILLS

- Trained personnel familiar with the product should use a spill kit for cleanup.
- Ensure all drains in the area are protected by an absorbent snake
- If the spilled substance is known, consult the SDS for cleanup measures.
- Use absorbent pads or absorbent powder to absorb spilled liquid.
- Place all contaminated material (pads, powder, water, etc.) in a spill bucket.
- Fill out a label on the bucket and transport it to the hazardous waste shed.
- Report to EHS and note on spill log

EMERGENCY HAZARDOUS SPILLS

- Activate the fire alarm system. Pull the nearest fire alarm to evacuate the building.
- Call Police Services or 911 as soon as you can safely do so. Report any details you know about the spill, such as:
- Location
- Material and physical state (e.g., liquid, powder, etc.)
- Quantity spilled
- Any known hazardous characteristics
- Provide information such as the safety data sheet or a chemical inventory to the fire department when they arrive.
- Contact EHS for assistance with coordinating a spill clean-up contractor.

PROCEDURES FOR SPILLS IN A LAB SETTING

General procedures

- Alert co-workers and occupants of the space of the danger
- Assess the severity of the emergency. Consider the possibility of exposure through contact, inhalation, and the increased fire hazard associated with flammable materials.
- The person spilling the chemical is responsible for notifying Science Staff /Faculty as soon as the severity of the spill allows.
- Anyone noticing a leak or spill is also responsible for contacting Science Staff / Faculty to initiate the clean-up processes.
- Science Staff / Faculty are responsible for the spill scene and coordinating clean-up efforts.
- If the spill is significant or results in an injury report it to EHS.

Flammable material spills

If flammable materials have been spilled, immediately eliminate all sources of ignition. Unplug all electrical devices, extinguish open flames, etc. Absorb the material quickly with the appropriate spill absorbent and notify Science Staff.

Spill kits

Spill kits are located in every lab room. Before any chemical experiment begins, staff will be trained on how to properly use spill kits, that is, the proper absorbent and the proper neutralizer for the type of spill.

Chemical spills on people

If a chemical is spilled on a person, immediately rinse the exposed area of the body and continue rinsing for 15 minutes. Use an eye wash station, emergency shower, or sink to rinse the exposed area. Consult the SDS for information on any delayed bodily reactions.

Eyes are extremely susceptible to chemical burns. Prompt and continued rinsing (for 15 minutes) can prevent severe eye damage. Assist an exposed person to the eyewash and ensure that they rise for the full 15 minutes. Seek medical attention as soon as possible, and bring the SDS with you to the emergency room.

In the event that the spill contaminated clothing, remove all contaminated clothing and rinse the exposed area for 15 minutes. Extra clothing is available at the Science Support Center.

SPILLS THAT HAVE THE POTENTIAL TO AFFECT STORMWATER SYSTEMS

- The facility maintains spill response equipment on site. Every effort will be made to contain the spill and prevent adverse impact to the stormwater control system.
- Evergreen personnel will notify EHS and Facilities Manager as soon as a potential emergency is recognized.
- The first Evergreen Emergency Response person at the scene will immediately assess the potential hazard. If the situation is considered an emergency that cannot be controlled by staff, a call for off-sire spill response will be made (911).
- Small spills may be managed on-site with absorbent, which can contain and soak up liquid on the pavement.
- Larger spills may be managed by placing a dike around the spill. EHS will assess the contained material for the appropriate clean-up options.
- If the spill is on grass or soil, absorbent will be used to cover as much of the spill as possible, and clean-up activities will begin as soon as possible.
- EHS or Facilities Manager will direct on-scene management and emergency response.
- Off-site spill response units will be directed to the scene and provided with information about the facility.
- Potential ignition sources will be extinguished. Storm drains or ditches near spills will be plugged or diked.

REPORTING SPILLS

EHS is responsible for reporting spills that have impacted or may impact nearby surface water, sanitary sewer, or groundwater. Spills that are contained within impervious asphalt, concrete, or indoor areas that don't drain to water systems generally don't need to be reported.

If you cause or become aware of a spill of this nature, report it to EHS (360) 791-2646 immediately.

Type of spill	Reporting requirements	Required contacts
Oil and hazardous substance spills to water	• Report it immediately.	• The National Response Center at 1-800-424-8802 • Washington Emergency Management Division at 1-800-258-5990
Release of hazardous or extremely hazardous substance	• Report it immediately. • See full EPCRA reporting requirements.	• The State Emergency Response Commission (SERC) at 1-800-258-5990 • Your Local Emergency Planning Committee (LEPC) • The National Response Center at 1-800-424-8802
Dangerous waste	• Report it immediately.	• Call 911 • Notify the appropriate Ecology regional office • For unplanned episodic events, also contact an HWTR regional office within 72 hrs.
Leaking underground storage tanks	• Report within 24 hours.	• Notify the appropriate Ecology regional office
Oil spills to ground	• Report within 90 days. • Oil industry contingency plan holders may have different reporting timeframes designated by their contingency plans.	• Notify the appropriate Ecology regional office
Spills to air	• Report within 90 days.	• Notify the appropriate Ecology regional office

Spill Log

Instructions: Record the following information for every hazardous material or chemical spill that occurs at the facility, except those spills that occur within containment areas. Any oil or fuel spill of 1 gallon or more on bare ground and any amount that reaches surface water or a storm drain must be reported in the State of Washington. Report spills to the Emergency Coordinator or designee. The Emergency Coordinator or designee will decide what agencies need to be notified.

Date and Time	Location	Description				Response Prodcedure		Comments
		Amount	Type of Material	Source, If Known	Reason for Spill/Leak	Notifications Made	Personnel Involved	

TRAFFIC CONTROL PROGRAM

Policy Overview

The Evergreen State College has developed the Traffic Control & Flagging program to safeguard Evergreen employees when working in the capacity of a flagger from potential hazards presented by public and campus motorists. This program establishes training and standard procedures for all affected employees and is intended to prevent traffic control-related accidents and/or injuries.

TRAINING

Any staff conducting flagging duties will have successfully completed flagger training and received certification. Refresher or training and certification are required every two years.

FLAGGING OPERATION BRIEFING

Any staff that are participating in flagging activities will receive site-specific training that is applicable to the project and environment. Training will include:

·The activities to be performed in the work zone
·The flagger's responsibilities
·Emergency flagger signals
·Specific work zone hazards
·Planned equipment and vehicle movements

PPE & Equipment

Hours of darkness

During hours of darkness (½ hour before sunrise & ½ after sunset) staff must wear a high visibility safety vest, shirt, or jacket that is worn as an outer garment and provides 360 degrees of visibility.

Daylight hours

During daylight hours staff must wear a high visibility safety vest, shirt, or jacket that is either fluorescent yellow-green, fluorescent orange-red, or fluorescent rec in color and must always be worn as an outer garment.

Hard hat

While participating in flagging duties staff must wear a yellow or white hard hat that is marked with at least 12 square inches of retroreflective tape in order to provide 360 degrees of visibility.

Stop paddle

All flaggers will have a 24-inch stop paddle constructed of reflective material.

Radios

Flaggers will be equipped with radios for communication.

Traffic Control Plan

Any time flagging will last more than one day a traffic control plan will be developed in coordination with the Department Supervisor and EHS. The plan must include but is not limited to:

- Sign use and placement
- Methods and devices for delineation and channelization
- Placement and maintenance of devices
- Placement of flaggers
- Roadway lighting (when applicable)
- Traffic regulations

FLAGGING DURING HOURS OF DARKNESS

If flagging operations take place at any time ½ hour before sunrise and/or ½ hour after sunset the following is required:

- Flaggers are required to don hours of darkness PPE
- Lights are required to illuminate the flagger station (* note that there is an exemption in emergency situations with an emergency being defined as “an unforeseen occurrence that endangers life, limb or property”.)

Table 6E-1 (MUTCD)
Stopping Sight Distance as a function of speed

Speed* (mph)	Distance (ft)
20	115
25	155
30	200
35	250
40	305
45	360
50	425
55	495
60	570
65	645
70	730
75	820

Table 6C-2 (MUTCD) Buffer Space

Speed* (mph)	Distance (ft)
20	115
25	155
30	200
35	250
40	305
45	360
50	425
55	495
60	570
65	645
70	730
75	820

WAC 296-155-305
Distance of Flagger Station in Advance of the Work Space

Speed* (mph)	Distance (ft)
20	35
25	55
30	85
35	120
40	170
45	220
50	280
55	335
60	415
65	485

Channelizing Device Spacing (Feet)

MPH	TAPER	TANGENT
50/70	40	80
35/45	30	60
25/30	20	40
One-Lane, Two-Way Tapers 20 foot Spacing Regardless of speed		
Downstream Tapers 20 foot Spacing Regardless of speed		

Advance Warning Sign Spacing Chart

Road Type	Speed	Distance Between Advance Warning Signs			
		A	B	C	D
Freeways and Expressways	55/70 MPH	1500' ±	1500' ±	1500' ±	1500' ±
Rural Highways	60/65 MPH	800' ±	800' ±	800' ±	800' ±
Rural Roads	45/55 MPH	500' ±	500' ±	500' ±	500' ±
Rural Roads and Urban Arterials	35/40 MPH	350' ±	350' ±	350' ±	NA
Rural Roads, Urban Arterials, Residential, Business Districts	25/30 MPH	200' ± (2)	200' ± (2)	200' ± (2)	NA
Urban Streets	25 MPH or less	100' ± (2)	100' ± (2)	100' ± (2)	NA

1. *All spacing may be adjusted to accommodate interchange ramps, at-grade intersections, and driveways.*
2. *This spacing may be reduced in urban areas to fit roadway conditions*

Merging, Shifting, and Shoulder Taper Lengths and Number of Channelization Devices Used
(all minimums)

Lane Width	10 feet				11 feet				12 feet				Shoulder Tapers	
	"L"		"1/2 L"		"L"		"1/2 L"		"L"		"1/2 L"		(Assumes 10' shoulder)	
MPH	Merg	Cone.	Shift	Cone	Merg	Cone	Shift	Cone	Merg	Cone	Shift	Cone	Length (ft)	Cone
20	70	6	35	3	75	6	40	3	80	6	40	3	25	3
25	105	6	55	4	115	7	60	4	125	7	65	4	35	3
30	150	8	75	5	165	9	85	5	180	10	90	5	50	3
35	205	8	105	5	225	9	115	5	245	9	125	5	70	4
40	270	10	135	6	295	11	150	6	320	12	160	6	90	4
45	450	16	225	9	495	18	250	9	540	19	270	10	150	6
50	500	14	250	8	550	15	275	8	600	16	300	9	170	6
55	550	15	275	8	605	16	305	9	660	18	330	9	185	6
60	600	16	300	9	660	18	330	9	720	19	360	10	200	6
65	650	17	325	9	715	19	370	10	780	21	390	11	220	7
70	700	19	350	10	770	20	385	11	840	22	420	12	235	7
													Shoulder Taper equals Shoulder Width x Speed / 3	

TUNNEL ENTRY PROGRAM

Policy Overview

The Evergreen state college utility tunnel system is an aging infrastructure system with inherent hazards such as the presence of asbestos-containing materials, limited communication capabilities, limited egress points, and zero natural light.

Any Evergreen employee or outside contractor entering Evergreen Utility Tunnels shall first receive an authorized person training via EHS, the Facilities Maintenance Manager, or their designee. The training will cover known hazards existing within the tunnels, an explanation of entrance/exit procedures, and provision of any documentation

TUNNEL ACCESS PROCEDURES

- Entrants will receive tunnel entry training prior to entering the tunnel.
- Teams (of at least 2) planning to enter the tunnel system will contact Evergreen Police Services to provide brief work plan summary and estimated excursion timeframe.
- Each team will sign out a radio provided by the CUP and verify operation by using it to check in with Evergreen Police Services upon entry into the tunnel system.
- Each individual entering the tunnel will carry a functional flashlight and verify its operation prior to entry.
- Each team member will be briefed on operations in the tunnel as well as any known hazards. Any additional observed hazards will be communicated to Evergreen staff immediately.

·Gas vehicles are prohibited in the tunnels.

- Electric carts will be driven at a speed that prevents hazardous conditions to persons and property.
- Each team will check out with Evergreen Police Services via radio as soon as all entrant staff have been accounted for and have safely exited the tunnel.

REQUIRED PERSONAL PROTECTIVE EQUIPMENT

- High visibility work wear or vest
- Hard hat
- Work boots
- Eye protection

RADIO USE

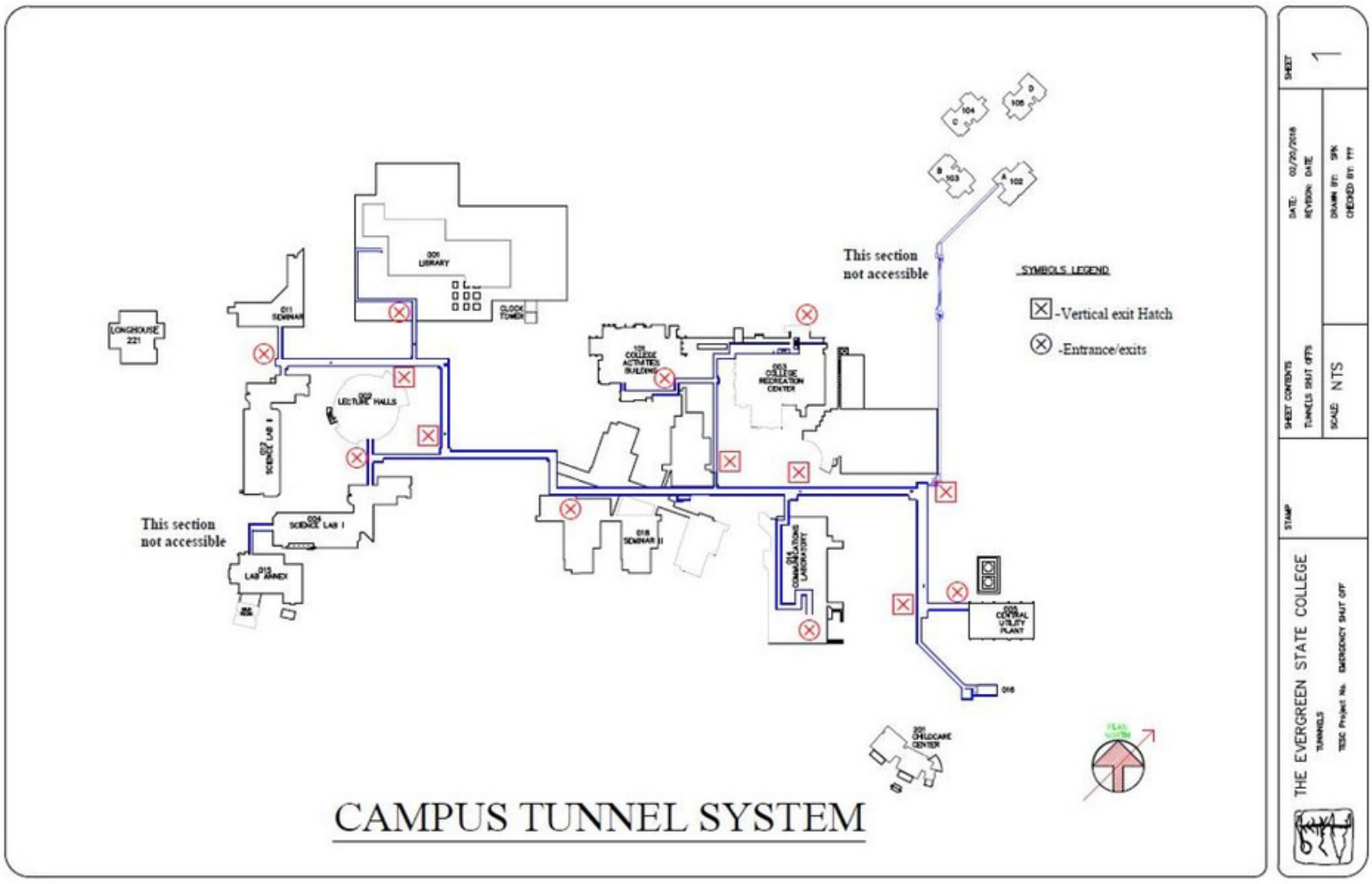
Check-in and check-outs are required for safety and accountability. Evergreen-provided Motorola CP200 or CP200d radios are for tunnel check-in/out and life safety & communications only. Additional communication means are the responsibility of the contractor.

Communication Lines:

- Police services general radio: Channel 3
- Dedicated Tunnel Repeater: Channel 1

ADDITIONAL CONTACT INFORMATION

- For life threating emergencies call: 911
- Evergreen Police Services Non-Emergency line: (360) 867-6832
- Evergreen Police Services Emergency line: (360) 867-6140
- EHS Safety Manager: (360) 791-2646



CONTRACTOR SAFETY ON CAMPUS

Policy Overview

Evergreen is committed to maintaining a safe campus which extends to the safety of contractors conducting work on campus. The Evergreen Office of Environmental Safety & Health will make every effort to preplan and coordinate elements of safety to ensure that both the contractor and Evergreen community are safe in spaces that are dually controlled by Evergreen and the contractor.

ACCIDENT PREVENTION PROGRAM REVIEW

Before conducting any work on site, the contractor will provide a copy of a site-specific safety plan for review by the Office of Environmental Safety & Health. The contractor will be expected to maintain compliance and adhere to what is outlined in their site-specific safety plan. If discrepancies are noted or there are conflicting items that conflict with Evergreen's safety policy, the Contractor will be notified. Copies will be kept on record for the duration of the project and a year following the project end.

EMPLOYEE TRAINING

The contractor will be expected to provide their employees with applicable training related to their job and work being conducted on campus. The Office of Environmental Safety & Health may require verification of contractor employee training. Copies will be kept on record for the duration of the project and a year following the project end.

CONFINED SPACES

When a contractor must perform work that involves permit required/ confined space entry,
The Evergreen State College **Project Managers** will:

- Inform the contractor that the workplace contains permit spaces and the permit space entry is allowed only through compliance with a permit space program meeting the requirements of Evergreen's written Confined Space Program.
- Apprise the contractor of the elements, including the hazards identified and the College's experience with the space, that make the space in question a permit space.
- Apprise the contractor of any precautions or procedures that the College has implemented for the protection of employees in or near permit spaces where contractor personnel will be working.
- Debrief the contractor at the conclusion of the entry operations regarding the permit space program followed and regarding any hazards confronted or created in permit spaces during entry operations.

When a contractor must perform work that involves permit required/ confined space entry,
The Evergreen State College **EHS Safety Manager** will:

- Request a copy of the contractor's Confined Space Program
- Ensure that the contractor has completed their own entry permit.
- Ensure that entrants have received confined space entry training.
- Coordinate entry operations with the contractor, when both the College's employees and the contractor will be working in or near permit spaces.

The College will communicate to the contractor that when their work requires entry into a confined space by their employees, it will be the responsibility of the contractor to ensure the safety of the space through monitoring, blowing, etc. The contractor will be responsible for acquiring, maintaining, calibrating, and using their own confined space entry equipment.

ASBESTOS

Evergreen will provide the contractor with any asbestos testing data pertaining to the work space that is available. If additional data is needed, the College will coordinate with the contractor to ensure that any ambiguous areas and/or materials are identified as asbestos containing or not.

CRANES

Whenever there is crane work conducted by a contractor on campus, the Office of Environmental Safety & Health will request and review:

- Documentation of crane certification
- Documentation of cane operator certification
- Crane lift plan

DETECTING & CORRECTING CONSTRUCTION PROJECT SAFETY HAZARDS

The Office of Environmental Safety & Health in correlation with Evergreen Project Managers and other Evergreen officials will conduct periodic project inspections. If any safety hazards are noted, they will be addressed and then communicated to the project consultant for correction and follow up. If any instances of imminent danger are noted by Evergreen Officials, the College reserves the right to stop work immediately until the hazardous condition can be resolved.