# Environmental, Health & Safety (EH&S) Handbook

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## I. Introduction

This employee EH&S Handbook has been developed to provide employees with answers to general questions concerning health and safety in the workplace. It is important, however, that you and your supervisor discuss site-specific policies and programs for your department. Your supervisor must inform you of the safety procedures and required training you will need to do your job. The college's policies, procedures, manuals, and many other safety resources may be found in the EH&S Office, Room 106K Wood Campus Center or by contacting the Director of EH&S at 615-230-3617.

### OSHA Background

The Federal Occupational Safety & Health Act of 1970 was enacted in an effort to improve the overall working environment and to provide every working person in the nation a safe and healthful work environment. This Act provided an opportunity for the various states to develop their own Occupational Health & Safety Programs. In Tennessee this was accomplished by the Tennessee Occupational Safety & Health Act of 1972, administered by the Tennessee Department of Labor.

### EH&S Mission Statement

The Environmental Health and Safety Office provides health, safety, and environmental services to Volunteer State Community College, including off-campus facilities, to facilitate compliance with all environmental, occupational health and safety regulations. These regulations include, but are not limited to, those promulgated by OSHA, EPA, TDEC, Tennessee Department of Labor, and applicable regulations under the Department of Transportation.

The Mission of the EH&S Office is to develop and coordinate appropriate programs to promote occupational health, reduce accidents and injuries, protect our environment, and provide technical assistance to administration, faculty, staff and students of VSCC regarding environmental and occupational health and safety regulatory compliance.

### EH&S Responsibilities

Good EH&S practices are the responsibility of all VSCC employees. The participation and cooperation of each person are essential to an effective program.

## Employee Responsibilities

Your responsibilities as a VSCC employee include:

- Following all EH&S rules and procedures;
- Reporting hazardous conditions to your supervisor;
- Wearing or using prescribed personal protective equipment (PPE);
- Reporting any job-related injury or illness to your supervisor; and
- Refraining from the operation of any equipment without both proper instructions and authorization.

## Supervisor Responsibilities

Each Supervisor is responsible for providing a working environment free from recognized health and safety hazards. Specific safety responsibilities of supervisors include:

- Informing new employees of their health and safety responsibilities, procedures, rules and regulations;
- Assuring that required equipment and personal protective devices are provided, maintained, and used;
- Taking prompt action when unsafe acts or conditions are reported or noted;
- Providing for health and safety training and education on a continuing basis;
- Investigating and reporting all job-related health or safety problems promptly;
- Coordinating or conducting internal inspections to assure safe and healthful working conditions;
- Requesting the assistance of the next higher level of supervision regarding budget requests for any health and safety improvements needed; and
- Ensuring their employees are made aware of their rights under the Tennessee Occupational Safety & Health Act of 1972. The State of Tennessee Public Employee, Safety and Health Protection on the Job poster is the authorized means of providing this information. The poster is available in the Human Resources Department as well as the Plant Operations Department.

## Unit Head Responsibilities

Deans, Directors, Chairs and other heads of academic and administrative units have primary responsibility for:

- The health and safety of their staff and students;
- Compliance with all applicable laws and regulations;

- Obtaining and providing funds needed for health and safety improvements and for making those improvements; and
- Requirements and responsibilities established by agencies external to the campus.

### Director of EH&S

The Director of EH&S is responsible for development, oversight, documentation and management of EH&S programs that protect the environment, provide safe and healthy conditions for work and study, and comply with applicable laws and regulations. The Director of EH&S provides educational programs, technical assistance, and EH&S services to the college. The Director of EH&S also functions as a consultant to deans, directors, and heads of academic and administrative units, other staff members, and students in all areas of environmental health and safety.

## II. Safety Practices

### Communications of Hazards in the Workplace

Faculty, staff, and students must be informed of any recognized hazards in their workplace. It is the responsibility of supervisors to provide adequate EH&S orientation related to standard operating procedures, hazards, and personal protective equipment. You should receive this orientation prior to working in the area.

Please make sure you understand all information presented at the orientation. If you have any language barriers, please explain these to your supervisor. Your supervisor must ensure that all applicable policies affecting your work area are readily available.

### Personal Protective Equipment (PPE)

Faculty, staff, and students may be required to wear PPE while performing their jobs, ie., welding, drilling, painting, etc. or when they are in certain environments (for example, chemical laboratories). Your supervisor will tell you the specific PPE you must wear and ensure that you know when it must be worn. The following is a general guide for selecting what may be necessary.

### Eye and Face Protection

Proper eye protection reduces your chances of injury and reduces the severity of injury if an accident does occur. Most workers who have had eye injuries were not wearing eye protection at the time.

All eye and face protective equipment must comply with the American National Standards Institute (ANSI) guidelines and be marked directly on the piece of equipment. Protective eyewear includes safety glasses, goggles and face shields.

Operations listed below are a few examples where eye and face protection may be required:

- Handling acids or caustics
- Welding
- Woodworking
- Metal working
- Chiseling
- Metal casting
- Handling solvents
- High pressure washing
- Handling human tissue, blood, or other bodily fluids
- Using lasers

Chemical Hazards – To protect the eyes and face from splash when handling bodily fluids, using or dispensing corrosive liquids, non-vented chemical goggles or safety glasses with side shields and full-face shield offer the best protection. Safety glasses are the minimum protection recommended of all operations involving hazardous chemicals.

Physical Hazards – When using high-pressure cleaning or spray equipment, safety glasses and full-face shields are the recommended PPE.

Those work activities that produce chips or dust – such as grinding/drilling, power fastening, or power tools – require safety glasses.

Welding – Welding operations require a full welding hood with the appropriate tinted vision screen. Safety glasses are also required to be worn under the hood.

When doing acetylene/oxygen torch soldering, brazing or cutting appropriately tinted safety glasses or tinted goggles are the appropriate PPE.

**Hand/Arm and Body Protection**

Almost 75% of workers who suffer hand injuries were not wearing gloves. Although no glove will offer you total protection from every hazard, wearing the correct glove will help no glove will offer you total protection from every hazard, wearing the correct glove will help you prevent hand injury. Make sure the gloves you use in your work area are designed to protect against the particular hazards that have been identified.

The following are general guidelines in selecting and using gloves:

- Use metal mesh or cut resistant gloves to prevent cuts from broken glassware, knives or other sharp object.
- Use leather gloves where repetitive motions are involved to prevent blisters, calluses and abrasions. Leather gloves also protect against rough surfaces, sparks, and moderate heat.
- Use cotton or other fabric gloves to protect against dirt and dust, or to better grasp slippery objects.

- Use rubber, neoprene, vinyl, or nitrile gloves to protect against chemicals.
- Workers who are sensitive to natural rubber latex should avoid direct contact with latex gloves and other rubber products.
- Check gloves before wearing to make sure they're not cracked, torn, or damaged in any way.
- Make sure gloves fit properly. They should cover your hands completely and be comfortable enough for you to perform your job.
- Take care to avoid contamination – don't let your bare skin touch contaminated gloves.
- Dispose of single-use gloves in the proper containers.

When using hazardous chemicals, specialized gloves offering protection for specific chemical families, a laboratory coat, and at times a splash apron are the appropriate PPE.

Insulated gloves and arm sleeve covers are recommended when handling hot or cold materials.

**Head and Foot Protection**

Occasions may develop when the use of a hard hat or other head protection and foot protection is necessary. All hard hats or safety shoes must meet the requirements for protection outlined by the American National Standards Institute (ANSI).

**Hearing Protection**

If your work areas or specific job tasks have been designated as requiring hearing protection, you must wear approved protective equipment. Personal stereos or Walkman's are not considered hearing protection. If you have questions about high noise levels in your work area, you should ask your supervisor or contact the EH&S Coordinator for more information.

**Respiratory Protection**

Some employees may be required to wear respirators for specific job duties. Respirators include dust masks, air-purifying negative-pressure respirators, self contained breathing apparatus, supplied-air respirators, and other such devices. If you wear one of these respirators, you must have a physical exam and you must be fit-tested and trained before using it on your job.

NOTE: Failure to use and maintain PPE may result in disciplinary actions.

**Training**

You may be required to attend in-house training sessions on such topics as bloodborne pathogens, hazard communication, hazardous waste, or laboratory safety. Supervisors of affected employees should exercise a measure of accommodation for these training needs. A checklist to help you understand which VSCC Health & Safety programs apply to you may be found on page 10.

In some cases, supervisors may conduct specialized training sessions (e.g., safety procedures for using powered equipment). Supervisors can contact EH&S for information or assistance in preparing training materials. Specialized training, e.g., forklift, asbestos awareness may be provided by outside training consultants.

Training should be provided:

- When an employee is hired, when an employee is given a new work assignment for which training has not previously been given; and
- When a new hazard (chemical or physical) is introduced into the workplace.

At a minimum, EH&S training for employees must include:

- Recognition of EH&S hazards;
- General and job-specific EH&S practices; and
- State regulations and VSCC EH&S policies applicable to the job.

**General Safety Rules**

- All classrooms, laboratories, offices, shops, storerooms, and passageways will be kept orderly and free from unnecessary debris.
- Floors will be cleaned and waxed in such a manner as to keep slipping hazards to a minimum.
- Flammable liquids will not be used to clean floors, clothing or equipment.
- Trash containers in offices, laboratories, shops and other work areas will be emptied each working day.
- Furnace, mechanical, and air handling rooms will not be used as storage areas.
- Worktables, stools, benches, tools and equipment will be maintained in good repair.
- Electrical and mechanical equipment will have moving parts adequately guarded.
- All electrical equipment will be properly grounded.
- Appropriate personal protective equipment and/or clothing will be worn in all areas and/or during operations requiring such use.
- Unauthorized persons will not tamper with electrical fuse boxes, alter existing wiring, or install new electrical wiring.
- Electrical cords will be maintained in good condition.
- Electrical cords must be the types that contain a built-in overload circuit breaker, they must not be extended and used outside the room in which the fixture outlet is located, must not be doubled up, and must not be located in such a manner as to create a tripping hazard. Where cords must be placed across paths of travel, cord covers must be used.

## Safe Handling of Laboratory Glassware

Supervisors in departments that use glassware must develop procedures to handle all glassware safely and ensure that all employees and/or students are informed of these procedures. Areas that should be addressed include:

- Glassware inspection
- Compatibility factors
- Effects of extreme temperature and pressure
- Matching glassware to its intended use
- Use of personal protective equipment
- Storage and handling
- Washing and clean-up
- Assembling apparatus
- Safe disposal of broken or disposable glassware

## Emergency Preparedness Procedures

The establishment of a well thought out emergency plan is one of the cornerstones of an effective safety program. Evaluating potential emergency situations, developing emergency procedures, and conducting practice exercises can help save lives. Detailed instruction regarding emergency procedures may be found in the VSCC Emergency Management Plan. See page 12 of this handbook for a summary of Emergency Procedures.

You should become familiar with the posted evacuation plan and how you should respond to a fire or other emergency in your building and be prepared to evacuate the building when necessary.

## When the Fire Alarm Sounds

If you are in any VSCC building and discover a fire, please take the following actions:

- Leave the building immediately.
- Pull the nearest fire alarm pull station and notify Campus police.
- Leave the area quickly, closing doors as you go to contain the fire and smoke.
- If you encounter smoke or flame during your escape, use an alternate exit. If you must exit through smoke, crawl on your hands and knees.

- Do not re-enter the building until emergency response officials have declared that it is safe to do so.

In the event of a serious injury requiring immediate medical assistance or any other emergency, remain calm, call campus police at 3911, notify them of the type and location of the emergency, answer any questions the dispatcher may have and remain on the line until released by the dispatcher.

**Employee Accidents**

You must report all work-related accident, injuries, or illnesses to your supervisor. If an injury or illness requires medical attention, supervisors must notify Campus Police (3595) and the Director of EH&S (3617).

**Student or visitor Accidents**

Any faculty or staff member who witnesses, is involved in, or is informed of an accident with a student or visitor should report the accident to Campus Police (3595).

**Automobile Accidents**

All vehicle accidents occurring on campus will be reported to Campus Police (3595), who will notify other offices or officials as appropriate.

All users of state vehicles are required to read, follow and understand the emergency information packet in the glove box of the vehicle. All accidents involving State vehicles must also be reported to Campus Police (3595).

## III. EH&S Program Checklist

The following checklists have been developed for you and your supervisor to understand the hazards and applicable EH&S Programs associated with your workplace or assigned duties. If you answer yes to questions in the 1st column, then the corresponding VSCC program and training requirements are, most likely applicable. Training may be provided by your supervisor, designated staff, EH&S, or outside vendors. Training must be provided and documented before performing any of the listed activities.

**Checklist for Work Areas**

| Activity | Applicable Program |
|---|---|
| Are there hazardous chemicals in your work area? | Hazard Communication Program |
| Do you provide first aid services or do you work with human blood, body fluids or tissues? | Bloodborne Pathogens Program |
| Do you use or service equipment which an unexpected restarting could cause injury? | Lockout/Tagout Procedures |
| Are you required to enter any confined spaces? | Confined Space Program |
| Do you operate industrial trucks (e.g., forklift, bucket truck, etc.)? | Forklift Operator Training |
| Does your area have fire extinguishers? | Emergency Management Plan |
| Do you work in a laboratory that uses hazardous chemicals? | Hazard Communication Plan<br>Chemical Hygiene Plan |
| Do you work in a laboratory that uses infectious agents, human blood tissue, bodily fluids or other biohazards? | Bloodborne Pathogens Program |
| Do you regularly lift heavy objects? | Safe Lifting Training |
| Do you generate hazardous waste? | Annual RCRA Training |
| Do you work in extreme temperatures? | Heat Stress Training |

**EH&S Programs**

EH&S has developed a number of programs for the health and safety of VSCC employees. Many of these programs are mandatory to ensure compliance with state and federal regulations. The following are some of the programs and safety manuals available:

- Bloodborne Pathogens Program
- Emergency Management Plan
- Hazard Communication Program
- Lockout/Tagout Program
- Chemical Hygiene Plan
- Confined Space Entry Program
- Pandemic Influenza Preparedness Plan
- Fire Protection Impairment Program

To review these manuals or programs, contact the Director of Environmental Health & Safety in Wood Campus Center Office 106K, ext. 3617.