



## **INJURY & ILLNESS PREVENTION PROGRAM (IIPP)**

### **Responsibility**

The Vice President of Administrative Services is the designated IIPP Administrator and has the authority and responsibility for implementing and maintaining this IIPP for San Bernardino Valley College.

All SBVC managers, supervisors and administrators are responsible for establishing and maintaining a safe working environment by providing effective training and promoting awareness for safety in the workplace. Questions pertaining to work place safety and the IIPP should be addressed to your immediate supervisor or manager, who can also provide you with a written or electronic copy of this IIPP.

All SBVC employees should be aware of safety procedures for their particular work area and the campus as a whole. All SBVC employees are expected to report accidents, injuries, or unsafe conditions immediately to their supervisor or the SBVC Facilities and Safety Committee.

Each department manager or supervisor is responsible for the safe operation of their department. Areas that present the highest number of potential hazards, such as laboratories, technical shops or maintenance operations are encouraged to convene their own department safety committees to assist with maintaining site-specific Code of Safe Practices (**Appendix A** of this document).

### **Compliance**

All employees of SBVC, including managers and supervisors, are responsible for contributing to a safe working environment by maintaining an awareness of safety and complying with safe and healthful work practices. SBVC's method of ensuring that faculty, staff and students are aware of and comply with safe work practices utilizes the following methods:

- Informing workers of the provisions of our IIPP through formal training programs
- Providing employees with a set of comprehensive safety policies and procedures
- Providing guidance and advocacy for SBVC employees through the SBVC Safety Committee. Reports of potential unsafe practices or working conditions can be made anonymously to the SBVC Safety Committee. Any

report addressing a potential safety hazard can be submitted without fear of reprisal.

- Providing regular and on-going safety training specific to the site and task conditions that employees are working in
- Performing regular inspections of work spaces to ensure a safe environment
- Recognition of faculty and staff efforts to provide a safe campus environment
- Following progressive disciplinary action for any employee that does not comply with this IIPP and safe work practices.

Any SBVC employee that does not comply with this IIPP shall be subject to progressive disciplinary action, up to and including termination. Progressive discipline will follow those guidelines as presented in the California Education Code and applied by the San Bernardino Community College District.

## **Communication**

Campus safety at SBVC is a product of effective communication. All managers and supervisors are accountable for sharing occupational safety and health information, policies and procedures with their staff and other members of the campus community. This information must be provided in a form that is readily understandable by all staff and community members.

Faculty and staff members are responsible for reporting occupational injuries and illnesses to their immediate supervisor without delay.

Injured workers need to complete an employee statement of occupational injury or illness. A separate worker's compensation claim form (DWC-1) may also be required. Questions pertaining to the SBCCD Worker's Compensation program should be addressed to the SBCCD Human Resources Department.

This system of communication is intended to encourage SBVC employees to actively participate in the creation of a safe working and learning environment. Methods of effective communication concerning a safe campus environment include:

- Direct one-on-one interaction
- Posted or distributed written safety information
- Email
- Formal training and orientation programs

Employees can report safety concerns anonymously if they perceive they shall be subject to any form of retribution. An anonymous safety complaint/suggestion form can also be found in **Appendix B** of this document. Please complete this form and forward it via campus mail to the office of the Vice President of Administrative Services. Concerns can also be sent by email by visiting the following web page: <http://www.sbccd.org/pages/218.asp>.

## **Hazard Assessment**

Managers and supervisors are ultimately responsible for the safety of the work environment. To ensure the on-going safety of the campus, managers and supervisors

shall be asked to perform regular safety inspections utilizing self-inspection guidelines found in **Appendix B** of this document to identify potential hazards and/or unsafe work practices. Addition inspection services shall also be provided by the San Bernardino Community College District's safety consultant, Keenan & Associates.

Periodic inspections shall be triggered by any of the following events:

- When the IIPP is implemented or revised
- When new substances, processes, procedures or equipment which present potential new hazards are introduced into our workplace
- When new, previously unidentified hazards are recognized
- When occupational injuries and/or illnesses occur
- Whenever workplace conditions warrant inspection, or on a semi-annual basis, whichever occurs first
- Whenever permanent or part-time workers are hired or re-assigned to processes, operations or tasks for which a hazard evaluation has not been previously conducted.

Records of the findings from these inspections, and any corrective actions taken, shall be maintained by the SBVC Facility and Safety Committee (FASC) and the responsible manager.

The FASC will provide a report of any observed safety concerns requiring correction to the appropriate department administrator or manager for action. This manager is responsible for making corrections in a timely manner and reporting their response, in writing, to the FASC.

General office areas should be inspected semi-annually and laboratory/shop areas should be inspected on a quarterly basis.

### **Accident/Exposure Investigations**

When an occupational injury or exposure occurs, the appropriate college manager or supervisor shall interview the injured employee(s) and any witnesses to identify factors that shall have contributed to the exposure or injury. The manager is required to inspect the accident scene to assess any correctable safety concerns. Documentation of the interviews and inspections, as well as any conditions requiring corrective action, shall be submitted to the Vice President of Administrative Services for evaluation. Copies of this documentation must be maintained by the appropriate manager or supervisor.

Supervisors are responsible for:

1. completing the supervisor's statement of occupational injury or illness immediately;
2. ensuring that any witnesses complete a statement of employee injury as soon after the incident as feasible;
3. forwarding these completed documents to the SBCCD Office of Human Resources; and,
4. correcting any safety hazards in a timely manner and document that response in writing

These statements are utilized in Worker's Compensation claims and must be completed immediately. Copies of the completed forms and the supervisor's response to the hazardous condition should be retained by that manager or supervisor, as well as forwarded to the Vice President of Administrative Services.

Master copies of these documents can be found on the SBCCD website at:

<http://www.sbccd.org/Include/Human%20Resources%20Forms/Workers%20Compensation/Instructions%20for%20Injured%20Worker%2001-09.pdf>

San Bernardino Community College District Office of Human Resources is responsible to:

1. recording and reporting to State Compensation Insurance Fund within five (5) days every employee injury or illness unless disability resulting from such injury or illness does not last through the day or does not require medical service other than minor first aid treatment;
2. and, maintaining a master log and summary of employee occupational injuries and exposures.

### **Hazard Correction**

All SBVC employees are expected to be proactive in providing a safe environment for work. Unsafe or unhealthy work practices, procedures or environments must be corrected promptly. If an unsafe condition can not be corrected in a timely manner, a realistic timetable for correcting the situation and controlling public exposure to potential hazards must be established by the appropriate college administrator (President or designee).

If a hazard presents an imminent danger to employees, and the hazard cannot be corrected without endangering personnel and/or property, then all exposed personnel will be evacuated from the area at the direction of the responsible manager or supervisor for that work area.

Employees remaining to correct the identified hazard shall do so ONLY if they are properly trained and have all of the safety equipment and resources to successfully mitigate the hazard. If specialized training, tools and/or materials are unavailable to SBVC staff, a qualified contractor will be retained to execute the necessary correction.

### **Training and Instruction**

All SBVC employees, including managers and supervisors, shall be provided with regular training and instruction on general and job-specific health and safety practices. Employees attending training mandated by this IIPP are expected to actively participate in the training, make recommendations on how the training program may be improved, and document their attendance by signing an attendance sheet. Training shall be presented in various formats, including face-to face training, hands-out materials, interactive electronic programs or videos.

Training will be provided when:

- The IIPP is established or revisions are made
- Prior to a worker beginning a new work assignment
- Whenever a staff member shall be potentially exposed to new safety hazards
- Whenever a staff member is assigned new or different work tasks
- Whenever new chemicals, materials, equipment or processes are introduced into the workplace
- Whenever a worker's safety performance is observed to be deficient

Training programs will be based on the specific needs of the employee within the context of their work classification and work environment. All staff members will be provided with the following mandatory training:

- An orientation on the IIPP, Emergency Action Plan and Fire Prevention Plan
- Means and methods for reporting unsafe conditions, work practices, injuries
- How to secure emergency medical services and/or first aid
- When to request additional training or instruction
- Identification of potential hazards in the workplace and those hazards that are specifically related to their job assignment.
- The means of minimizing or eliminating potential hazards, such as maintaining safe work conditions, safe work practices and the use of personal protective equipment.

A comprehensive list of available training programs is available from the Vice President of Administrative Services or the SBCCD Human Resources office. A training matrix that outlines the safety training programs appropriate to different job classifications can be found at the following SBCCD web site: <http://www.sbccd.org/pages/144.asp>

Documentation of training:

- Safety training records shall be maintained for each employee for the duration of their employment. Copies of this documentation shall be maintained in their respective work area by the appropriate college manager/supervisor and made available to the employee and the Facility and Safety Committee when requested.

## **Recordkeeping**

All records and reports that are generated by this program shall be maintained according to the requirements in T8CCR 3203(b).

### **Occupational Injuries and Illness Reports**

- a) Records of occupational injuries and exposures will be kept on file for a minimum of the past three consecutive years (3) and will be made available for review by Cal / OSHA. This includes:
  - a. Notice of Safety Deficiencies and Audits
  - b. Report of Corrected Safety Deficiencies
  - c. Documentation of safety and health training
  - d. Scheduled and periodic safety inspections
  - e. Incident review records and interviews pertaining to injury incidents

- f. Committee meeting records
- b) The Cal/OSHA Log 300 and Summary of Occupational Injuries and Illness shall be maintained for a minimum of five (5) years.
- c) The Cal / OSHA summary for the previous year will be posted during the months of February through April on designated safety bulletin boards throughout the campus for review by employees.

### **Employee Access to Exposure and Medical Records**

The College recognizes those employees, their designated representative and authorized representatives of the Chief of the Division of Occupational Safety and Health (Cal / OSHA) - have a right of access to relevant exposure and medical records. Such access is necessary to yield both direct and indirect improvements in the detection, treatment and prevention of occupational disease. Whenever an employee or designated representative requests access to a record, the College shall assure that access is provided in a reasonable time, place and manner, as outlined in T8CCR3204.

## Appendix A: Codes of Safe Practice

### CODES OF SAFE PRACTICES – SECURITY OFFICERS

With the passage of SB 1626 in 1998, state law will soon require security guards in K-12 school districts or California community college districts to complete a course of training developed by BSIS. The new law takes effect July 1, 2000, and effects guards working on school property for more than 20 hours per week. The new training requirement affects only guards employed pursuant to a contract between a K-12 school district or California community college district and a private patrol operator.

#### Personal Security

- A. **Pay attention to your surroundings.** Stay in well-lighted areas and use the Buddy System (2 people walking or working together). Have your keys and flashlight ready and be aware of your surroundings as you go. Have a working cell phone nearby and alert others as to when they can expect you back at base.
- B. **Use good judgment.** Only approach unwanted visitors when you feel comfortable that you have communicated with your base and that you understand the nature of the risk of contact. Don't hesitate to call for additional campus security assistance.
- C. **Avoid physical confrontation if at all possible.** Physical intervention should be the last resort. Avoid physically intervening in school fights or arguments. Use your voice to command and control the combatants. You shall become the target and a victim. Request help via radio, cell phone or send a student to obtain additional adult assistance. Crowd dispersal is a key component to avoiding escalation.

#### Threat Recognition

- A. Be aware of restraining orders against custodial and non-custodial adults. Preferably, request a picture to accompany the name.
- B. All threats must be treated seriously. Be aware of your standard protocol for assessing, investigating and documenting threats. Written statements should be obtained from threat makers, witnesses and the targets of threats. The actions taken by administrators to address each threat should also be documented. Report any aggressive notes or letters from students to the administration and security supervisors.
- C. Disgruntled current and former employees, suspended and expelled students, irate parents, job applicants, and other high-risk individuals are very likely to attend hearings, meetings, and visits. Be alert for these individuals and report them to the security office.
- D. Suspicious activity shall include suspicious vehicles on and around campus, suspicious persons in and around school buildings including those taking photographs or videotaping, suspicious packages around the building perimeter

and/or in the school, and suspicious information seeking efforts by phone or by unknown “visitors”.

## **Security Management Procedures**

All threats must be treated seriously and you should be familiar with your District protocol for assessing, investigating and documenting threats. Written statements should be obtained from threat makers, witnesses and the targets of threats. The actions taken by administrators to address each threat should also be documented.

Security administrators should develop and use questions similar to those above to evaluate each threat, rather than relying on checklists of profiling characteristics or personality traits. A review of the threat maker’s past disciplinary and psychological record should be made as a part of the evaluation process. In addition to disciplinary action consistent with school policies, police also should be involved when appropriate.

School district administration offices typically house the offices of the superintendent, board members, personnel department, treasurer, special education staff, and student services hearing officers and staff. The ever-increasing political nature of school board meetings, and for that matter school politics in general, often draws a presence and attention to school administration offices and the individuals housed in these offices. It is not uncommon for highly charged meetings and emotional issues to result in escalated undesirable and threatening behavior.

## **Security Supervisor Management Controls**

A number of measures can be taken to reduce administration office safety threats. These include, but are not limited to:

1. Security personnel should know the threat assessment protocol that applies not only to dealing with threats made by and/or to students, but also to threats made to school administrators and office staff. (A number of cases have been documented where threats have been made to harm building administrators as well as district-level coordinators, supervisors, directors, and even superintendents.)
2. Include administration offices, both at the building and district levels, in school security assessments conducted for your district.
3. Develop crisis guidelines for school administration sites as would be done for actual school buildings
4. Train administrators and school office staff (including secretaries and receptionists) on appropriate security policies and procedures, threat assessment and management, office safety measures, and district crisis guidelines and proper security reporting procedures.
5. Incorporate crime prevention into school office layouts and central office designs, including in reception areas, secretarial offices, and inside administrative offices and meeting rooms
6. Evaluate methods for reducing and controlling access to district central offices and support facilities
7. Establish basic procedures for conducting potentially high-risk meetings and hearings

8. Assess physical security measures, including the use of security technology, for reducing administration office safety risks and for preparing to manage incidents of crime and violence in office settings
9. Evaluate the contents, in addition the layout, of administration offices, as well as communication methods that would be used in a threatening situation

### **Reducing After-School and Weekend Risks**

Wide open doors and facilities, limited (if any) supervision, and leaving the school on “auto pilot” create security concerns. Security officials should explore ways to reduce risks and to prepare for managing those incidents that cannot be prevented. Some specific steps to consider might include:

1. Reduce the number of open doors that are accessible to outsiders once the normal school day has ended. (Of course, reduced access should also be a part of daytime school security procedures, too.)
2. Concentrate (as best possible) after-school and weekend activities in limited areas of the building. If at all possible, avoid having activities spread out all over the school. If you do have multiple activities taking place, evaluate security-staffing needs and try to identify ways to contain the activities to their designated areas. Gate-off sections of the building not being used for after-school activities in accordance with fire code standards and good common sense.

### **Response Protocols**

1. **Responding to threat of physical assault by fighting students**
  - a. Security will check to make sure radio equipment is in proper operating condition.
  - b. Security will communicate with other Security in order to assess response needs.
  - c. At least one Security Officer will provide assistance in case of threat of physical assault. Security will assess need to contact local police services and promptly notify base of his/her situation and recommendations.
  - d. In all cases involving student confrontation, Security will clear the classroom, playground or other areas of all non-participating students before addressing confrontation.
  - e. Security should attempt to identify non-aggressive student and remove him/her from area to diffuse situation.
  - f. In cases involving weapons, Security will immediately notify base. They in turn will notify police services.
  - g. Security personnel will work together to control and contain situation by isolating student with weapon until assistance arrives.
2. **Responding to threat by non-student**
  - a. All Security will be on constant alert for non-students entering campus grounds. While patrolling assigned areas, Security will make sure all outside doors are locked and are in good operating condition.
  - b. Security will report situation to base and other Security Officers and will use his/her best judgment in recommending to base whether police services should be contacted.

- c. Security will take initiative in preventing non-students from entering school grounds by approaching non-students before they enter campus. If already on campus, Security will be courteous in asking non-student to leave and will escort non-student off campus. If necessary, Security will exercise reasonable force in escorting non-student off campus.
- d. Security will remain in continual contact with base and other Security officers regarding whereabouts of non-students, number of non-students, description, direction and whether non-student is armed.
- e. For schools with closed campus at lunchtime, Security will maintain student control by restricting students to a central area such as a playground.

**3. Patrols playground, school buildings, offices, hallways, cafeteria and restrooms.**

- a. Prior to commencing patrol of assigned area, Security will check to make sure radio equipment is in proper operating condition.
- b. Security will keep assigned area clean and free of debris and foreign substances; and will report hazards to supervisor and custodial staff.
- c. In case of fire, earthquake, chemical spill or other emergency requiring evacuation, Security will promptly notify office (base), and supervise assigned area for safe evacuation of all staff and students.
- d. Security will keep exits open during school hours and conduct inspections to verify ability to easily exit.
- e. Security will inspect alarm system to determine that system is operable.

**Safety Tips When dealing with angry individuals:**

- **Apologize for inconvenience.**
- **Control your emotions.**
- **Empathize or sympathize with the individual.**
- **Ignore sarcasm/personal attacks.**
- **Never argue with the individual.**
- **Offer assistance.**
- **Never accuse the individual.**
- **Call for help when necessary.**

**Safety Tips/Internal Violence**

- **Try to calm angry individual by talking**
- **Empathize/sympathize**
- **Ask if you can help**
- **Understand angry individual's position**
- **Focus on individual's behavior**
- **Call for help when necessary**

## Safety Tips/External Violence

- Don't open door to stranger after business hours
- Notify base if working late
- Don't let a caller know you are alone
- Report suspicious characters to police services
- Build a rapport with police services
- Use the "buddy system"

## Preparing for Workplace Violence Summary

- Verbal threats are as serious as physical threats
- Don't ignore violent or angry outbursts
- Stress and conflict can cause a violent incident
- Protect yourself and be cautious
- Report acts of violence no matter how small
- Don't treat threats lightly
- Make sure your radio is fully charged
- Have 911 hotline procedures
- Don't freeze
- Watch for warning signs
- Know your location

## Conduct

You are in the public eye. In your official duties, your actions reflect upon you, the school, and the school district. Be helpful and courteous at all times. Conduct yourself as a professional.

### I Attitude

Your attitude will largely determine your success in gaining the cooperation of the motoring public, your co-workers and supervisor, children and parents. Courtesy cannot be over emphasized. Be courteous and helpful even under adverse conditions. **DO NOT** assume an overbearing manner in your contacts with the general public or schoolchildren.

### II Attention to Your Duties

The lives of school children are in your hands. Attention to the duties and responsibilities of your position is required at all times.

### III Personal Interest

Show a personal interest in your work by learning and using the names of as many children and parents as possible. Using names shall help promote a positive attitude with the general public and will help when giving directions to schoolchildren.

### IV Equipment

Make sure your equipment is in good working condition and fully charged. Be familiar with its proper function and maintenance.

## V Appearance

Dress to suit weather conditions. Your appearance must be neat and clean at all times when on duty. A slovenly appearance results in a loss of public respect. Remember you are in the public eye.

### Personal Safety Rules

- A. **Focus your attention on students.** In order to avoid being injured your attention must be focused on the students you are supervising. Don't engage in a lengthy conversation with other employees or individual students. A stray ball could hit you. Be prompt and efficient when dealing with disciplinary matters. Don't let the problem student distract you too long from the majority of students.
- B. **Position yourself for the widest, safest view.** You want to take a position in the area you are working that affords you the best view for supervising the greatest number of students. Don't let trees; walls, or other obstacles obstruct your view. Don't take a position with your back to students engaged in a playground activity, especially those involving throwing objects.
- C. **Don't engage in play activities with students.** If you are engaged in playing with a group of students you could be injured by an activity of another group of student, and other students shall be without supervision.
- D. **Be aware of safety hazards.** Play areas and equipment should be safety inspected, but there shall be slip, trip, or fall hazards in the area you are working. Watch your step. Report safety hazards to your supervisor immediately.
- E. **Scan your area of responsibility.** Once you have positioned yourself appropriately, visually scan the area you are responsible for securing and supervising. This will help keep you alert.

**Remember, keeping alert and aware of what is going on in the area you are supervising is not only your job, but will also help you avoid being injured.**

For additional information, contact the [National Association of School Resource Officers](#)

## CODES OF SAFE PRACTICES – ADMINISTRATORS

### General Campus Safety Rules

- A. **Be aware of where you are walking.** Trip and slip hazards – uneven exterior walkways, stacks of paper or boxes, for example, or recently polished and slick floors, or extension cords – are common in all areas of the campus.
- B. **Be aware of the location of the nearest fire extinguisher.** It shall come in handy. Read the instructions on the extinguisher now, before you need to use it.
- C. **Familiarize yourself with the emergency exit procedures.** An emergency plan must be posted near the exit of every room to notify all employees and students of how to exit the room, the evacuation route and where they are to assemble after.
- D. **Chairs are not step stools.** Don't use them for that purpose. Use a step stool or ladder when reaching for elevated supplies and materials.
- E. **Electric extension cords are to be used only as a temporary source of power.** Extension cords should be unplugged, rolled up and stored immediately after use. This includes cords to classroom appliances and overhead projectors. Improper use of electricity is the second most common cause of fires in schools.
- F. **Flammable and combustible liquids shall not be stored in classrooms, offices or resource rooms.** These liquids are the third most common cause of school fires.
- G. **Be cautious with the use flammable materials.** They shall not be attached to windows and doors and no more than 50% of all the wall space shall be covered with flammable materials. Window coverings, drapes and curtains shall not be installed unless they meet the Fire Marshall's fireproofing requirements. Keep decorations for holidays only.

### Office Ergonomic Safety Rules

Administrators don't spend the majority of time at their desks using the computer, as Clerical Personnel do, but you still need to be aware of Repetitive Motion Injuries (RMI) and should take the following steps to reduce the chance of such an injury. As an Administrator it your responsibility to assure all staff follow safe practices, and that includes yourself.

- A. **Complete a workstation ergonomic evaluation.** If available, utilize an in-house resource to complete the evaluation or complete a self-evaluation (checklist attached).

- B. **Make the necessary adjustments to your chair.** Most chairs will have at least two or three adjustment levers to use to change the height and tilts of the seat and backrest. Adjust the chair so you can achieve the most comfortable typing position.
- C. **Take the weight on your feet.** Ensure that your feet rest on the ground so that not all the weight is on your lower back. If your feet do not reach the ground, utilize a footrest.
- D. **Type with your wrist at a neutral position.** Adjust the height of chair and keyboard to ensure that, while typing, the shoulders are relaxed, there is a 90-degree angle at the elbow, and the wrist is in a flat position (i.e. no raising or lowering of the wrist from the forearm in order to reach the keys).
- E. **Avoid neck and eye strain.** Position the monitor directly in front of you at a distance with its top at eye level. Keep the monitor between 18" and 24" from the eye, and place it at a right angle to the window. If you are entering data from a document, prop the document up or, better still, place it at eye level with the use of a document holder.
- F. **Keep the mouse close.** Avoid having to reach either up or out to use the mouse. If possible it should be kept next to and at the same height as the keyboard. Hold the mouse gently and move it with the arm rather than the wrist.
- G. **Take your breaks.** Take micro-breaks from typing for 2-3 minutes every half-hour and stop typing for ten minutes after typing uninterrupted for 2 hours. If possible, get outside during breaks for some valuable fresh air and, during the day, regularly stretch the hands, arms and back.

### Office Equipment Safety Rules

- A. **Electric Powered Equipment can be a shock hazard.** Periodically, check the equipment for frayed cords and defective plugs. Never clean or service electric powered equipment with the power on; always disconnect the equipment from the power source. Don't use the equipment with wet hands or while on a damp floor.
- B. **Shut off electrical equipment.** Before leaving the classroom, be sure electrical equipment, like audiovisual equipment, is shut off and unplugged.
- C. **Be careful with paper cutters.** Cutters should only be used on a level, unobstructed and clear surface. The finger guard must be in place before using the cutter. The lever should be put down and in the locked position when it is not being used.
- D. **Photocopy machines could be harmful to the eyes.** These machines emit an extremely bright light. Always make sure the machine cover is down when operating it.

- E. **Close file cabinet and desk drawers when not in use.** File cabinets are unstable with the drawers open and a co-worker or student could walk into an open drawer.
- F. **Do not change a burnt out projection bulb when the projector is still hot.** Disconnect the projector and wait for it to cool before changing the bulb.

### Materials Storage Safety Rules

- A. **Store materials in an organized way.** Do not overload shelves and drawers. Do not store materials on top of cabinets. Materials shall not be stored within 36" of the ceiling.
- B. **Weight can be a safety hazard.** Heavier items should be stored on the lower shelves at about chest height or lower.
- C. **Place cabinets and shelves away from room exits.** They could fall over and block the exit.
- D. **Keep aisles and passageways free of materials.** As well as being a trip and fall hazard, they could also impede a quick exit in an emergency.
- E. **Keep the storeroom neat.** Everything should have its place in the storeroom. Avoid placing old boxes and files in there on a permanent basis and keep clutter to a minimum.

### Lifting Rules

It is just as important to keep your body in shape for the task as it is any other tool you use for other jobs. You can injure yourself just as easily lifting light objects as you can lifting heavier ones if you don't lift properly and your "tool" is not in shape for the job. Lifting is a thinking person's job.

- A. **Before you lift something, prepare yourself and plan the move.** Make sure you are limber and physically fit enough to do the task safely. Daily exercises will keep your body ready for lifting and help you feel better. Size up the load to make sure you can handle it safely. If you think the load is too bulky or too heavy, ask someone to help you or try to break it up into smaller, more manageable loads. Use a hand truck or dolly if necessary. Plan your route and make sure the path is clear of trip, slip, and fall hazards.
- B. **Use proper body mechanics when lifting.** Stand close to the object with your feet about shoulder width apart. Squat down, bending at the hips and knees. Keep your back straight. As you grip the load, arch your lower back inward by pulling your shoulders back and sticking your chest out with chin tucked in. Be sure to keep the load close to your body. When you set the load down, squat down, bending at the hips and knees, keeping your lower back arched in.

- C. **Turn, don't twist.** Twisting is not the thing to do. Instead of twisting, turn your whole body in the direction that you want to go. Twisting when carrying a load puts a lot of undue stress on your back.
- D. **Push, don't pull.** Whenever you have to move something that is on a cart, a dolly, or a hand truck, push the load. Pushing puts less strain on your back.
- E. **Don't store heavy objects higher than your waist.** If heavy objects aren't stored higher than your waist then you won't have to lift them higher than your waist. Lifting objects overhead puts a lot of undue stress on your back. It's one of the surest ways to injure your back.
- F. **Lift like a pro and avoid the pain.** Learning how to lift and carry safely is one of the most important things you can do for your back. It's not hard to put these suggestions to use, and the payoffs will be well worth the time and effort you put into it.

**OFFICE WORKSTATION EVALUATION**

**Date:**  
**Employee Name:**  
**Location:**  
**Reason:**

**Evaluator:**  
**Title:**  
**Department:**  
**Hours a day at VDT:**

**CHAIR**

	<b>Yes</b>	<b>No</b>
Does employee know how to make adjustments to chair position?	<input type="checkbox"/>	<input type="checkbox"/>
Is employee sitting at a height they find comfortable?	<input type="checkbox"/>	<input type="checkbox"/>
Are employee's feet resting on the floor? (If not, is there a footrest available?)	<input type="checkbox"/>	<input type="checkbox"/>
Is the backrest at an angle and height that provides optimum lumbar support?	<input type="checkbox"/>	<input type="checkbox"/>
Does employee use backrest while typing (i.e., no tilting forward)?	<input type="checkbox"/>	<input type="checkbox"/>
Are thighs parallel to the floor or better still, sloping down slightly?	<input type="checkbox"/>	<input type="checkbox"/>
Is there pressure on the back of the employee's knees?	<input type="checkbox"/>	<input type="checkbox"/>
Are armrests used just for rest periods, and not while typing?	<input type="checkbox"/>	<input type="checkbox"/>

**Comments/Adjustments/Equipment Needed:**

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**KEYBOARD**

	<b>Yes</b>	<b>No</b>
While typing, are upper arms within contact of torso?	<input type="checkbox"/>	<input type="checkbox"/>
Are shoulders relaxed?	<input type="checkbox"/>	<input type="checkbox"/>
Are forearms parallel to the floor (i.e., 90° angle at the elbow)?	<input type="checkbox"/>	<input type="checkbox"/>
Are wrists and hands straight and in-line with the forearm?	<input type="checkbox"/>	<input type="checkbox"/>
Are wrist rests used just for rest periods, and not while typing?	<input type="checkbox"/>	<input type="checkbox"/>

**Comments/Adjustments/Equipment Needed:**

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**MONITOR**

	<b>Yes</b>	<b>No</b>
Is the top of the monitor at or slightly below eye level?	<input type="checkbox"/>	<input type="checkbox"/>
Is monitor between 18 and 24 inches from the eyes?	<input type="checkbox"/>	<input type="checkbox"/>
Is monitor directly behind keyboard?	<input type="checkbox"/>	<input type="checkbox"/>
Is monitor clean and free of glare?	<input type="checkbox"/>	<input type="checkbox"/>
Is monitor at right angles to windows?	<input type="checkbox"/>	<input type="checkbox"/>
Is a document holder used when appropriate?	<input type="checkbox"/>	<input type="checkbox"/>

**Comments/Adjustments/Equipment Needed:**

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**KEYING/MOUSE TECHNIQUE**

	<b>Yes</b>	<b>No</b>
Is a light keying touch used?	<input type="checkbox"/>	<input type="checkbox"/>
Does the employee move arms, not wrists when reaching for distant keys?	<input type="checkbox"/>	<input type="checkbox"/>
Do the hands and wrists “float” over the keys?	<input type="checkbox"/>	<input type="checkbox"/>
Is the numeric pad used for cursor control?	<input type="checkbox"/>	<input type="checkbox"/>
Are keystroke alternatives used instead of the mouse whenever possible?	<input type="checkbox"/>	<input type="checkbox"/>
Is the mouse held gently (instead of the death grip)?	<input type="checkbox"/>	<input type="checkbox"/>
Is the mouse moved with the arm rather than the wrist?	<input type="checkbox"/>	<input type="checkbox"/>
Is the mouse as close to the keyboard as possible?	<input type="checkbox"/>	<input type="checkbox"/>
Is the mouse switched periodically to the other hand?	<input type="checkbox"/>	<input type="checkbox"/>
Does the employee use a light touch when clicking?	<input type="checkbox"/>	<input type="checkbox"/>

**Comments/Adjustments/Equipment Needed:**

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**SCHEDULE/BREAKS/EXERCISE**

	<b>Yes</b>	<b>No</b>
Has employee recently worked more than 8 hours a day for an extended period?	<input type="checkbox"/>	<input type="checkbox"/>
Does the employee stop typing for 10 minutes after typing uninterrupted for 2 hours?	<input type="checkbox"/>	<input type="checkbox"/>
Does the employee take micro breaks (2-3 minutes) every half-hour?	<input type="checkbox"/>	<input type="checkbox"/>
Does the employee vary their posture regularly during the day?	<input type="checkbox"/>	<input type="checkbox"/>
Does the employee stand up and walk around during the micro breaks?	<input type="checkbox"/>	<input type="checkbox"/>
Does the employee regularly stretch (particularly the hands and wrists)?	<input type="checkbox"/>	<input type="checkbox"/>
Does the employee focus on distant objects at least every 7 minutes?	<input type="checkbox"/>	<input type="checkbox"/>

**Comments/Adjustments/Equipment Needed:**

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**DESK ORGANIZATION**

	<b>Yes</b>	<b>No</b>
Is the floor around the desk cluttered (preventing leg movement)?	<input type="checkbox"/>	<input type="checkbox"/>
Is the desktop cluttered (resulting in cramped typing positions)?	<input type="checkbox"/>	<input type="checkbox"/>
Is other needed equipment (e.g., 10-key machine) accessible without reaching?	<input type="checkbox"/>	<input type="checkbox"/>
Does the employee use a headset if required to use phone while typing?	<input type="checkbox"/>	<input type="checkbox"/>
Is there minimal reaching above the shoulder and below the waist?	<input type="checkbox"/>	<input type="checkbox"/>

**Comments/Adjustments/Equipment Needed:**

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**OTHER**

	<b>Yes</b>	<b>No</b>
Does the employee feel informed about the hazards of computer use?	<input type="checkbox"/>	<input type="checkbox"/>
Are they knowledgeable about controlling those hazards through correct workstation setup, modifying their schedule, and using better technique?	<input type="checkbox"/>	<input type="checkbox"/>
Do they know the procedure for reporting physical problems?	<input type="checkbox"/>	<input type="checkbox"/>

**Comments/Adjustments/Equipment Needed:**

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## CODES OF SAFE PRACTICES – CLERICAL

### General Office Safety Rules

The office environment is generally considered to be a safe one, and office workers tend to be complacent about their safety since there are no obvious safety hazards. It is this complacency that can lead to unsafe work practices and eventually injuries.

- A. **Be a ware of where you are walking.** Trip and slip hazards – stacks of paper or boxes in the aisle, for example, or recently polished and slick floors – are common in the office.
- B. **Beware of the location of the nearest fire extinguisher.** It shall come in handy. Read the instructions on the extinguisher now, before you need to use it.
- C. **Familiarize yourself with the emergency exit procedures.** Learn the general layout of the office and the location of the nearest exit in case you have to get out of the building in a hurry.
- D. **Chairs are not step stools.** Don't use them for that purpose. Use a step stool or ladder when reaching for elevated supplies and materials.
- E. **Keep it neat.** Avoid clutter both on the desktop and underneath the desk. Keep your workstation and the area around it orderly.

### Office Ergonomic Safety Rules

Repetitive Motion Injuries (RMI) are the most prevalent injuries among those who spend most of their day at a desk working with computers, and office workers should take the following steps to reduce the chance of such an injury.

- A. **Complete a workstation ergonomic evaluation.** If available, utilize an in-house resource to complete the evaluation or complete a self-evaluation (checklist attached).
- B. **Make the necessary adjustments to your chair.** Most chairs will have at least two or three adjustment levers to use to change the height and tilts of the seat and backrest. Adjust the chair so you can achieve the most comfortable typing position.
- C. **Take the weight on your feet.** Ensure that your feet rest on the ground so that not all the weight is on your lower back. If your feet do not reach the ground, utilize a footrest.
- D. **Type with your wrist at a neutral position.** Adjust the height of chair and keyboard to ensure that, while typing, the shoulders are relaxed, there is a

90-degree angle at the elbow, and the wrist is in a flat position (i.e. no raising or lowering of the wrist from the forearm in order to reach the keys).

- E. **Avoid neck and eye strain.** Position the monitor directly in front of you at a distance with its top at eye level. Keep the monitor between 18" and 24" from the eye, and place it at right angle to the window. If you are entering data from a document, prop the document up or, better still, place it at eye level with the use of a document holder.
- F. **Keep the mouse close.** Avoid having to reach either up or out to use the mouse. If possible it should be kept next to and at the same height as the keyboard. Hold the mouse gently and move it with the arm rather than the wrist.
- G. **Take your breaks.** Take micro-breaks from typing for 2-3 minutes every half-hour and stop typing for ten minutes after typing uninterrupted for 2 hours. If possible, get outside during breaks for some valuable fresh air and, during the day, regularly stretch the hands, arms and back.

### Office Equipment Safety Rules

- A. **Electric Powered Equipment can be a shock hazard.** Periodically, check the equipment for frayed cords and defective plugs. Never clean or service electric powered equipment with the power on; always disconnect the equipment from the power source. Don't use the equipment with wet hands or while on a damp floor.
- B. **Be careful with paper cutters.** Cutters should only be used on a level, unobstructed and clear surface. The finger guard must be in place before using the cutter. The lever should be put down and in the locked position when it is not being used.
- C. **Photocopy machines could be harmful to the eyes.** These machines emit an extremely bright light. Always make sure the machine cover is down when operating it.
- D. **Close file cabinet and desk drawers when not in use.** File cabinets are unstable with the drawers open and a co-worker could walk into an open drawer.

### Storeroom Safety Rules

- A. **Store your equipment safely.** Everything should have its place in the storeroom. Avoid placing old boxes and files in there on a permanent basis and keep clutter to a minimum. A neat clean storeroom can greatly reduce the chance of accidents.
- B. **Weight can be a safety hazard.** Heavier items should be stored on the lower shelves at about chest height or lower. Be careful not to overload shelves.

- C. **Electrical/water heater rooms are not storerooms.** Rooms with main electrical panels are not designed as storerooms. If electrical rooms must be used for storage, however, make sure there is a clear area at least 36" from electrical panels. Electrical rooms must be free of all liquids. A water heater is a source of ignition; don't store flammable materials in rooms with water heaters.

## Lifting Rules

It is just as important to keep your body in shape for the task as it is any other tool you use for other jobs. You can injure yourself just as easily lifting light objects as you can lifting heavier ones if you don't lift properly and your "tool" is not in shape for the job. Lifting is a thinking person's job.

- A. **Before you lift something, prepare yourself and plan the move.** Make sure you are limber and physically fit enough to do the task safely. Daily exercises will keep your body ready for lifting and help you feel better. Size up the load to make sure you can handle it safely. If you think the load is too bulky or too heavy, ask someone to help you or try to break it up into smaller, more manageable loads. Use a hand truck or dolly if necessary. Plan your route and make sure the path is clear of trip, slip, and fall hazards.
- B. **Use proper body mechanics when lifting.** Stand close to the object with your feet about shoulder width apart. Squat down, bending at the hips and knees. Keep your back straight. As you grip the load, arch your lower back inward by pulling your shoulders back and sticking your chest out with chin tucked in. Be sure to keep the load close to your body. When you set the load down, squat down, bending at the hips and knees, keeping your lower back arched in.
- C. **Turn, don't twist.** Twisting is not the thing to do. Instead of twisting, turn your whole body in the direction that you want to go. Twisting when carrying a load puts a lot of undo stress on your back.
- D. **Push, don't pull.** Whenever you have to move something that's on a cart, a dolly, or a hand truck, push the load. Pushing puts less strain on your back.
- E. **Don't store heavy objects higher than your waist.** If heavy objects aren't stored higher than your waist than you won't have to lift them higher than your waist. Lifting objects overhead puts a lot of undue stress on your back. It's one of the surest ways to injure your back.
- F. **Lift like a pro and avoid the pain.** Learning how to lift and carry safely is one of the most important things you can do for your back. It's not hard to put these suggestions to use, and the payoffs will be well worth the time and effort you put into it.

**OFFICE WORKSTATION EVALUATION**

**Date:**  
**Employee Name:**  
**Location:**  
**Reason:**

**Evaluator:**  
**Title:**  
**Department:**  
**Hours a day at VDT:**

**CHAIR**

	<b>Yes</b>	<b>No</b>
Does employee know how to make adjustments to chair position?	<input type="checkbox"/>	<input type="checkbox"/>
Is employee sitting at a height they find comfortable?	<input type="checkbox"/>	<input type="checkbox"/>
Are employee's feet resting on the floor? (If not, is there a footrest available?)	<input type="checkbox"/>	<input type="checkbox"/>
Is the backrest at an angle and height that provides optimum lumbar support?	<input type="checkbox"/>	<input type="checkbox"/>
Does employee use backrest while typing (i.e., no tilting forward)?	<input type="checkbox"/>	<input type="checkbox"/>
Are thighs parallel to the floor or better still, sloping down slightly?	<input type="checkbox"/>	<input type="checkbox"/>
Is there pressure on the back of the employee's knees?	<input type="checkbox"/>	<input type="checkbox"/>
Are armrests used just for rest periods, and not while typing?	<input type="checkbox"/>	<input type="checkbox"/>

**Comments/Adjustments/Equipment Needed:**

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**KEYBOARD**

	<b>Yes</b>	<b>No</b>
While typing, are upper arms within contact of torso?	<input type="checkbox"/>	<input type="checkbox"/>
Are shoulders relaxed?	<input type="checkbox"/>	<input type="checkbox"/>
Are forearms parallel to the floor (i.e., 90° angle at the elbow)?	<input type="checkbox"/>	<input type="checkbox"/>
Are wrists and hands straight and in-line with the forearm?	<input type="checkbox"/>	<input type="checkbox"/>
Are wrist rests used just for rest periods, and not while typing?	<input type="checkbox"/>	<input type="checkbox"/>

**Comments/Adjustments/Equipment Needed:**

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**MONITOR**

	<b>Yes</b>	<b>No</b>
Is the top of the monitor at or slightly below eye level?	<input type="checkbox"/>	<input type="checkbox"/>
Is monitor between 18 and 24 inches from the eyes?	<input type="checkbox"/>	<input type="checkbox"/>
Is monitor directly behind keyboard?	<input type="checkbox"/>	<input type="checkbox"/>
Is monitor clean and free of glare?	<input type="checkbox"/>	<input type="checkbox"/>
Is monitor at right angles to windows?	<input type="checkbox"/>	<input type="checkbox"/>
Is a document holder used when appropriate?	<input type="checkbox"/>	<input type="checkbox"/>

**Comments/Adjustments/Equipment Needed:**

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**KEYING/MOUSE TECHNIQUE**

	<b>Yes</b>	<b>No</b>
Is a light keying touch used?	<input type="checkbox"/>	<input type="checkbox"/>
Does the employee move arms, not wrists when reaching for distant keys?	<input type="checkbox"/>	<input type="checkbox"/>
Do the hands and wrists “float” over the keys?	<input type="checkbox"/>	<input type="checkbox"/>
Is the numeric pad used for cursor control?	<input type="checkbox"/>	<input type="checkbox"/>
Are keystroke alternatives used instead of the mouse whenever possible?	<input type="checkbox"/>	<input type="checkbox"/>
Is the mouse held gently (instead of the death grip)?	<input type="checkbox"/>	<input type="checkbox"/>
Is the mouse moved with the arm rather than the wrist?	<input type="checkbox"/>	<input type="checkbox"/>
Is the mouse as close to the keyboard as possible?	<input type="checkbox"/>	<input type="checkbox"/>
Is the mouse switched periodically to the other hand?	<input type="checkbox"/>	<input type="checkbox"/>
Does the employee use a light touch when clicking?	<input type="checkbox"/>	<input type="checkbox"/>

**Comments/Adjustments/Equipment Needed:**

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**SCHEDULE/BREAKS/EXERCISE**

	<b>Yes</b>	<b>No</b>
Has employee recently worked more than 8 hours a day for an extended period?	<input type="checkbox"/>	<input type="checkbox"/>
Does the employee stop typing for 10 minutes after typing uninterrupted for 2 hours?	<input type="checkbox"/>	<input type="checkbox"/>
Does the employee take micro breaks (2-3 minutes) every half-hour?	<input type="checkbox"/>	<input type="checkbox"/>
Does the employee vary their posture regularly during the day?	<input type="checkbox"/>	<input type="checkbox"/>
Does the employee stand up and walk around during the micro breaks?	<input type="checkbox"/>	<input type="checkbox"/>
Does the employee regularly stretch (particularly the hands and wrists)?	<input type="checkbox"/>	<input type="checkbox"/>
Does the employee focus on distant objects at least every 7 minutes?	<input type="checkbox"/>	<input type="checkbox"/>

**Comments/Adjustments/Equipment Needed:**

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**DESK ORGANIZATION**

	<b>Yes</b>	<b>No</b>
Is the floor around the desk cluttered (preventing leg movement)?	<input type="checkbox"/>	<input type="checkbox"/>
Is the desktop cluttered (resulting in cramped typing positions)?	<input type="checkbox"/>	<input type="checkbox"/>
Is other needed equipment (e.g., 10-key machine) accessible without reaching?	<input type="checkbox"/>	<input type="checkbox"/>
Does the employee use a headset if required to use phone while typing?	<input type="checkbox"/>	<input type="checkbox"/>
Is there minimal reaching above the shoulder and below the waist?	<input type="checkbox"/>	<input type="checkbox"/>

**Comments/Adjustments/Equipment Needed:**

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**OTHER**

	<b>Yes</b>	<b>No</b>
Does the employee feel informed about the hazards of computer use?	<input type="checkbox"/>	<input type="checkbox"/>
Are they knowledgeable about controlling those hazards through correct workstation setup, modifying their schedule, and using better technique?	<input type="checkbox"/>	<input type="checkbox"/>
Do they know the procedure for reporting physical problems?	<input type="checkbox"/>	<input type="checkbox"/>

**Comments/Adjustments/Equipment Needed:**

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## CODES OF SAFE PRACTICES – CUSTODIANS

### Personal Safety Rules

Often custodians work alone at night. Special precautions must be taken against unwanted visitors.

- A. **Pay attention to your surroundings.** Custodial work can become routine and your attention shall waver. You must keep alert and aware of what is going on around you.
- B. **Work in a well-lit area.** Make sure security lighting is functioning properly. Replace burnt bulbs and clean lenses when necessary. Report inoperative outside security lights to your supervisor. Adjust cleaning schedules to include unlit areas during daylight hours when possible. Obtain a flashlight if it would be useful.
- C. **Know where co-workers are working.** Know where to get help if you need it. To communicate with co-workers, custodians can use two-way radios. Just the sight of the radio shall be a deterrent to unwanted visitors.
- D. **Get help with heavy or awkward objects.** Don't try to do a job by yourself if it requires two people to do it safely.
- E. **When working inside, make sure entrances are secured.** Check doors to make sure they are locked from the inside when cleaning interiors. Make sure you can promptly exit the room in an emergency.
- F. **Use good judgment.** You are not a police officer or security guard. Only approach unwanted visitors when you feel comfortable doing so. Don't hesitate to call 911 for help.

### Storeroom Safety Rules

An overcrowded, unorganized storeroom is an accident about to happen. A misplaced broom or mop shall cause you to trip and injure yourself. Improperly stored cleaning supplies can cause serious injuries. A neat, clean storeroom can greatly reduce the potential for accidents.

- A. **Store supplies safely.** All chemical containers must be properly labeled. Store chemicals according to instructions on container labels. Be aware of where the Material Safety Data Sheets (MSDS) are kept for all the chemicals you use. Flammable cleaning supplies must be stored away from sources of ignition like hot water heaters.
- B. **Weight can be a safety hazard.** Heavier items should be stored on the lower shelves at about chest height or lower. Be careful not to overload shelves.

- C. **Electrical/water heater rooms are not storerooms.** Rooms with electrical panels are not designed as storerooms. However, if electrical rooms must be used for storage, make sure there is clear area at least 36" from electrical panels. Electrical rooms must be free of all liquids. A water heater is a source of ignition. Don't store flammable materials in rooms with water heaters.
- D. **Keep it neat.** Keep at least one aisle of your storage areas open at all times. Protruding nails, and torn or sharp corners can cause serious cuts and bruises. Remove or pad them. Be alert to the careless actions of others.

### Ladder Safety Rules

- A. **Use a straight ladder if you must lean the ladder against a support.** Avoid using an "A" frame ladder in this situation – it's not the right equipment for the job. Metal ladders must not be used near exposed electrical circuits or power lines. "A" frame ladders are safest if they are ten feet or less in length – never use one over 20 feet long.
- B. **Inspect the ladder before you use it.** No ladder is safe if it is missing rungs, if the rungs or rails are defective, or if it is in a weakened condition. Wood ladders should be inspected for side rails that are cracked or split, and sharp edges or splinters on cleats, rungs or side rails. Make certain spreaders can be locked in place. Be sure straight ladders have safety feet. If a ladder cannot be repaired, dispose of it promptly.
- C. **Set up your ladder safely.** If you must set up a ladder in a traffic area, use a barricade or guard to prevent unexpected collisions. Lock or block any nearby doors that open toward you. Keep the area around the ladder base uncluttered. Avoid side-to-side tilting by resting your ladder base on a solid, level surface. When using a stepladder, make sure it's fully open and its spreader is locked. Position a straight ladder at a four-to-one ratio – means every four feet of the ladder's length to one foot away from the support point. Never lean a ladder against an unstable surface.
- D. **Climb and descend ladders cautiously.** Face the ladder and hold on with both hands. If you need tools, carry them in a tool belt or raise and lower them with a hand line. Don't take a chance on slipping – check ladder rungs and the bottoms of your shoes for slippery substances. Take one step at a time and don't skip steps.
- E. **Use common sense when working on ladders.** Never reach or lean too far to either side. To maintain your balance, keep your belt buckle between the ladder rails. Don't climb higher than the second tread from the top on a stepladder or the third rung from the top on a straight ladder. Only one person shall be on a ladder at a time. Don't place tools on the rungs or top of the ladder.

## Electrical Powered Tool Safety Rules

Tools can save time and make your job easier, but each power tool has potential risks that must not be ignored. Because you use your tools daily, you can begin to take them for granted. Always think “safety” when using your tools.

- A. **Manufacturers supply manuals with tools and equipment.** Read the manuals before you use the equipment. Keep the manuals handy for future reference. Have an experienced operator provide instructions and a demonstration of the equipment before you use it. Practice using the equipment before you begin a large-scale job.
- B. **Prepare the equipment and yourself for work.** Examine the tools for safety defects before you use them. Check electrical cords for frayed wires and defective plugs. If an extension cord is required, make sure the gauge of wire in the cord is compatible with the power supply and tool. Make sure the ground plug is in place. Examine the tool for cracks and safety defects. Check for loose or missing bolts and knobs. Keep safety guards in place at all times. Wear protective clothing provided by your supervisor and recommended by the equipment manufacturer (See Protective Clothing Reference Chart).
- C. **Avoid hazards while operating equipment.** Clear the work area of trip, slip, and fall hazards and things that might get in your way while working. Designate the work areas with safety cones when possible. Keep a tight grip on the equipment, and position the tool comfortably close to your body. Be mindful of others around you. Always shut off the tool when you are not using it and disconnect it from the power supply.
- D. **Charging batteries can be dangerous.** Take special precautions when charging batteries on electric carts. Read the manual before beginning. Charge the batteries only in a well-ventilated area away from any sources of ignition and where there is an eye wash station and deluge shower.
- E. **Report any inoperative or unsafe equipment to your supervisor.** Take unsafe equipment out of service until it can be repaired or replaced.

## Fuel Powered Tool Safety Rules

These tools have potential risks that must not be ignored. Oscillating blades on hedge trimmers can cut and maim. High velocity air from blowers can kick up dust and debris into the eyes and lungs. The cutting surfaces of chain saws are capable of gnawing chunks of skin and bone. Tools can save time and make your job easier, but each power tool has potential risks that must not be ignored. Because you use your tools daily, you can begin to take them for granted. Always think “safety” when using your tools.

- A. **Manufacturers supply manuals with tools and equipment.** Read the manuals before you use the equipment. Keep the manuals handy for future reference. Have an experienced operator provide instructions and a

demonstration of the equipment before you use it. Practice using the equipment before you begin a large-scale job.

- B. **Take care when refueling and storing the equipment.** Using a safety can, refuel on a hard surface in a well ventilated area. Refuel when the tool or equipment is cool and let the piece cool before transporting and storing it. If storing for long periods, drain the liquids. Fuel must be kept in and dispensed from an Underwriters Laboratory (UL) listed safety container and stored in a properly vented flammable liquids cabinet.
- C. **Prepare the tool and yourself for work.** Examine the equipment for safety defects before you use them. Examine the tool for cracks and safety defects. Check for loose or missing bolts and knobs. Keep safety guards in place at all times. Wear protective clothing provided by your supervisor and recommended by the equipment manufacturer (See Protective Clothing Reference Chart).
- D. **Avoid hazards while operating equipment.** Clear the work area of trip, slip, and fall hazards and things that might get in your way while working. Designate the work areas with safety cones when possible. Be mindful of pedestrians, wire fences and objects hidden in the grass and hedges. Shut off the tool when not using it. Remember, hot tools can cause severe burns.

## Lifting Rules

It is just as important to keep your body in shape for the task as it is any other tool you use for other jobs. You can injure yourself just as easily lifting light objects as you can lifting heavier ones if you don't lift properly and your "tool" is not in shape for the job. Lifting is a thinking person's job.

- A. **Before you lift something, prepare yourself and plan the move.** Make sure you are limber and physically fit enough to do the task safely. Daily exercises will keep your body ready for lifting and help you feel better. Size up the load to make sure you can handle it safely. If you think the load is too bulky or too heavy, ask someone to help you or try to break it up into smaller, more manageable loads. Use a hand truck or dolly if necessary. Plan your route and make sure the path is clear of trip, slip, and fall hazards.
- B. **Use proper body mechanics when lifting.** Stand close to the object with your feet about shoulder width apart. Squat down, bending at the hips and knees. Keep your back straight. As you grip the load, arch your lower back inward by pulling your shoulders back and sticking your chest out with chin tucked in. Be sure to keep the load close to your body. When you set the load down, squat down, bending at the hips and knees, keeping your lower back arched in.
- C. **Turn, don't twist.** Twisting is not the thing to do. Instead of twisting, turn your whole body in the direction that you want to go. Twisting when carrying a load puts a lot of undo stress on your back.

- D. **Push, don't pull.** Whenever you have to move something that's on a cart, a dolly, or a hand truck, push the load. Pushing puts less strain on your back.
- E. **Don't store heavy objects higher than your waist.** If heavy objects aren't stored higher than your waist than you won't have to lift them higher than your waist. Lifting objects overhead puts a lot of undue stress on your back. It's one of the surest ways to injure your back.
- F. **Lift like a pro and avoid the pain.** Learning how to lift and carry safely is one of the most important things you can do for your back. It's not hard to put these suggestions to use, and the payoffs will be well worth the time and effort you put into it.

### Riding Equipment Safety Rules

Not only the operator of riding equipment is at risk, but also other staff and students in the area. Awareness of safety must be high at all times when using this equipment.

- B. **All riding equipment comes equipped with manuals.** Read the manuals and become completely familiar with the equipment before using it. Keep the manuals handy for future reference. Have an experienced operator provide instructions and a demonstration of the equipment before you use it. Practice on a small area before taking the equipment out on the job.
- C. **Prepare the equipment and yourself for work.** Thoroughly inspect the equipment prior to using it (most equipment manuals have inspection checklists). Make sure all the factory installed safety devices are operating properly, and don't use the equipment if they are not. Immediately report all equipment faults to your supervisor. Wear protective clothing. (See Protective Clothing Reference Chart).
- D. **Avoid hazards while operating the equipment.** Before you start to use the equipment clear the work area of potential hazards. Check the area for rocks and small objects that could be hurled by the blades. Remove other obstructions. Designate the work areas with safety cones or barrier tape when possible.
- E. **Keep alert.** While using some riding equipment, it is possible to lose concentration. You must guard against becoming unaware of your surroundings. Keep staff and students at a safe distance from the equipment and work area. Never allow other riders on the equipment when you are operating it. Students are never allowed on any riding equipment.
- F. **Do not leave the equipment unattended.** After turning off the equipment according to the manual instructions, remove the ignition key. The equipment must never be left unattended in an area where students have access – children shall think it is an interesting toy, not the potentially dangerous piece of equipment it is.

- G. **Follow shutdown instructions in the manual.** Carefully follow the post-operating instructions contained in the manual. Always clean the equipment after use and store it in a secure area.

## PROTECTIVE CLOTHING REFERENCE CHART

Note: This is a general reference chart only. Always consult the tool/equipment manual or your supervisor for the required protective clothing before using any tool or equipment.

<b>TOOL/EQUIPMENT</b>	<b>Hard Hat</b>	<b>Goggles</b>	<b>Gloves</b>	<b>Hearing</b>	<b>Mask</b>
LINE TRIMMER		X	X	X	
EDGER		X	X	X	
HEDGE TRIMMER		X	X	X	
CHAIN SAW	X	X	X	X	
BLOWER		X	X	X	X
PRESSURE WASHER			X	X	
POWER AUGER			X	X	
TRENCHER			X	X	
LITTER VACUUM			X	X	
ROTOTILLER			X	X	
PAINT STRIPER		X	X	X	X
MOWERS (WALK BEHIND)		X	X	X	
EQUIPMENT (RIDING)			X	X	
PESTICIDE/HERBICIDES		X	X		X
ELECTRIC POWER TOOLS		X	X	X	X
AR= As recommended in manual					
OTHER TOOLS/EQUIPMENT	AR	AR	AR	AR	AR

## CODES OF SAFE PRACTICES – GROUNDS CARETAKER

### Storeroom Safety Rules

An overcrowded, unorganized storeroom is an accident about to happen. A neat, clean storeroom can greatly reduce the potential for accidents.

- A. **Store chemicals safely.** All chemical containers must be properly labeled. Store chemicals according to instructions on container labels. Be aware of where the Material Safety Data Sheets (MSDS) are kept for all the chemicals you use. Store flammable materials in a properly vented flammable liquids cabinet away from sources of ignition like hot water heaters.
- B. **Store your tools safely.** Each tool should have its place in the storeroom. The tools should only be stored after inspecting them for safety hazards and cleaning them. Check electrical tools for frayed wires and defective plugs. Make sure the ground plug is in place. Cords should be neatly wrapped and secured on the tool. Keep extension cords in good repair.
- C. **Weight can be a safety hazard.** Heavier items should be stored on the lower shelves at about chest height or lower. Be careful not to overload shelves.
- D. **Electrical/water heater rooms are not storerooms.** Rooms with electrical panels are not designed as storerooms. However, if electrical rooms must be used for storage, make sure there is clear area at least 36" from electrical panels. Electrical rooms must be free of all liquids. A water heater is a source of ignition. Don't store flammable materials in rooms with water heaters.
- E. **Keep it neat.** Keep at least one aisle of your storage areas open at all times. Protruding nails, and torn or sharp corners can cause serious cuts and bruises. Remove or pad them. Be alert to the careless actions of others.

### Electrical Powered Tool Safety Rules

Tools can save time and make your job easier, but each power tool has potential risks that must not be ignored. Because you use your tools daily, you can begin to take them for granted. Always think "safety" when using your tools.

- A. **Manufacturers supply manuals with tools and equipment.** Read the manuals before you use the equipment. Keep the manuals handy for future reference. Have an experienced operator provide instructions and a demonstration of the equipment before you use it. Practice using the equipment before you begin a large-scale job.

- B. **Prepare the equipment and yourself for work.** Examine the tools for safety defects before you use them. Check electrical cords for frayed wires and defective plugs. If an extension cord is required, make sure the gauge of wire in the cord is compatible with the power supply and tool. Make sure the ground plug is in place. Examine the tool for cracks and safety defects. Check for loose or missing bolts and knobs. Cutting and boring tools should have sharp, clean cutting surfaces. Keep safety guards in place at all times. Wear protective clothing provided by your supervisor and recommended by the equipment manufacturer (See Protective Clothing Reference Chart).
- C. **Avoid hazards while operating equipment.** Clear the work area of trip, slip, and fall hazards and things that might get in your way while working. Designate the work areas with safety cones when possible. Keep a tight grip on the equipment, and position the tool comfortably close to your body. Be mindful of others around you. Always shut off the tool when you are not using it and disconnect it from the power supply.
- D. **Charging batteries can be dangerous.** Take special precautions when charging batteries on electric carts. Read the manual before beginning. Charge the batteries only in a well-ventilated area away from any sources of ignition and where there is an eye wash station and deluge shower.
- E. **Report any inoperative or unsafe equipment to your supervisor.** Take unsafe equipment out of service until it can be repaired or replaced.

### Fuel Powered Tool Safety Rules

These tools have potential risks that must not be ignored. Oscillating blades on hedge trimmers can cut and maim. High velocity air from blowers can kick up dust and debris into the eyes and lungs. The cutting surfaces of chain saws are capable of gnawing chunks of skin and bone. Regardless of the equipment type, care must be exercised to minimize the possibility of accident or injury. Don't take power tools and the risks they pose for granted.

- A. **Manufacturers supply manuals with tools and equipment.** Read the manuals before you use the equipment. Keep the manuals handy for future reference. Have an experienced operator provide instructions and a demonstration of the equipment before you use it. Practice using the equipment before you begin a large-scale job.
- B. **Take care when refueling and storing the equipment.** Using a safety can, refuel on a hard surface in a well ventilated area. Refuel when the tool or equipment is cool and let the piece cool before transporting and storing it. If storing for long periods, drain the liquids. Fuel must be kept in and dispensed from an Underwriters Laboratory (UL) listed safety container and stored in a properly vented flammable liquids cabinet.
- C. **Prepare the tool and yourself for work.** Examine the equipment for safety defects before you use them. Examine the tool for cracks and safety defects. Check for loose or missing bolts and knobs. Keep safety guards in place at all times. Wear protective clothing provided by your supervisor and

recommended by the equipment manufacturer (See Protective Clothing Reference Chart).

- D. **Avoid hazards while operating equipment.** Clear the work area of trip, slip, and fall hazards and things that might get in your way while working. Designate the work areas with safety cones when possible. Be mindful of pedestrians, wire fences and objects hidden in the grass and hedges. Shut off the tool when not using it. Remember, hot tools can cause severe burns.

## Riding Equipment Safety Rules

Not only the operator of riding equipment is at risk, but also other staff and students in the area. Awareness of safety must be high at all times when using this equipment.

- A. **All riding equipment comes equipped with manuals.** Read the manuals and become completely familiar with the equipment before using it. Keep the manuals handy for future reference. Have an experienced operator provide instructions and a demonstration of the equipment before you use it. Practice on a small area before taking the equipment out on the job.
- B. **Prepare the equipment and yourself for work.** Thoroughly inspect the equipment prior to using it (most equipment manuals have inspection checklists). Make sure all the factory installed safety devices are operating properly, and don't use the equipment if they are not. Immediately report all equipment faults to your supervisor. Wear protective clothing. (See Protective Clothing Reference Chart).
- C. **Avoid hazards while operating the equipment.** Before you start to use the equipment clear the work area of potential hazards. Check the area for rocks and small objects that could be hurled by the blades. Remove other obstructions. Designate the work areas with safety cones or barrier tape when possible.
- D. **Keep alert.** While using some riding equipment, it is possible to lose concentration. You must guard against becoming unaware of your surroundings. Keep staff and students at a safe distance from the equipment and work area. Never allow other riders on the equipment when you are operating it. Students are never allowed on any riding equipment.
- E. **Do not leave the equipment unattended.** After turning off the equipment according to the manual instructions, remove the ignition key. The equipment must never be left unattended in an area where students have access – children shall think it is an interesting toy, not the potentially dangerous piece of equipment it is.
- F. **Follow shutdown instructions in the manual.** Carefully follow the post-operating instructions contained in the manual. Always clean the equipment after use and store it in a secure area.

## Tree Trimming Safety Rules

- A. **There is a difference between pruning and trimming.** Tree trimming requires special training and equipment. Tree trimming operations should be supervised directly by the Maintenance or Grounds supervisor or his/her designee. Pruning is the removal of a branch for various reasons – it's broken and about to fall, it's low enough for students to reach, or the branch obstructs the use of play equipment. If you are in doubt about whether you should do the work, consult with your supervisor.
- B. **Familiarize yourself with the tools to use and the job at hand.** Read the instruction manuals for the tools you will be using. Carefully survey the job, looking for electrical power lines and other potential hazards. Plan ahead for where branches shall fall. Wear the necessary protective clothing (See Protective Clothing Reference Chart).
- C. **Avoid hazards while pruning.** Clear the work area of trip and fall hazards and things that might get in your way while working. Designate the work area with safety cones or barrier tape when possible. Remember ladder safety rules. Don't bite off more than you and your tools can handle. Prune branches off in small pieces not more than two feet long. Start pruning from the section furthest away from the trunk, working your way towards the trunk.
- D. **Clean up is part of the job.** Immediately after pruning, remove the debris.

## Ladder Safety Rules

- A. **Use a straight ladder if you must lean the ladder against a support.** Avoid using an "A" frame ladder in this situation – it's not the right equipment for the job. Metal ladders must not be used near exposed electrical circuits or power lines. "A" frame ladders are safest if they are ten feet or less in length – never use one over 20 feet long.
- B. **Inspect the ladder before you use it.** No ladder is safe if it is missing rungs, if the rungs or rails are defective, or if it is in a weakened condition. Wood ladders should be inspected for side rails that are cracked or split, and sharp edges or splinters on cleats, rungs or side rails. Make certain spreaders can be locked in place. Be sure straight ladders have safety feet. If a ladder cannot be repaired, dispose of it promptly.
- C. **Set up your ladder safely.** If you must set up a ladder in a traffic area, use a barricade or guard to prevent unexpected collisions. Lock or block any nearby doors that open toward you. Keep the area around the ladder base uncluttered. Avoid side-to-side tilting by resting your ladder base on a solid, level surface. When using a stepladder, make sure it's fully open and its spreader is locked. Position a straight ladder at a four-to-one ratio – means every four feet of the ladder's length to one foot away from the support point. Never lean a ladder against an unstable surface.

- D. **Climb and descend ladders cautiously.** Face the ladder and hold on with both hands. If you need tools, carry them in a tool belt or raise and lower them with a hand line. Don't take a chance on slipping – check ladder rungs and the bottoms of your shoes for slippery substances. Take one step at a time and don't skip steps.
- E. **Use common sense when working on ladders.** Never reach or lean too far to either side. To maintain your balance, keep your belt buckle between the ladder rails. Don't climb higher than the second tread from the top on a stepladder or the third rung from the top on a straight ladder. Only one person shall be on a ladder at a time. Don't place tools on the rungs or top of the ladder.

## Lifting Rules

It is just as important to keep your body in shape for the task as it is any other tool you use for other jobs. You can injure yourself just as easily lifting light objects as you can lifting heavier ones if you don't lift properly and your "tool" is not in shape for the job. Lifting is a thinking person's job.

- A. **Before you lift something, prepare yourself and plan the move.** Make sure you are limber and physically fit enough to do the task safely. Daily exercises will keep your body ready for lifting and help you feel better. Size up the load to make sure you can handle it safely. If you think the load is too bulky or too heavy, ask someone to help you or try to break it up into smaller, more manageable loads. Use a hand truck or dolly if necessary. Plan your route and make sure the path is clear of trip, slip, and fall hazards.
- B. **Use proper body mechanics when lifting.** Stand close to the object with your feet about shoulder width apart. Squat down, bending at the hips and knees. Keep your back straight. As you grip the load, arch your lower back inward by pulling your shoulders back and sticking your chest out with chin tucked in. Be sure to keep the load close to your body. When you set the load down, squat down, bending at the hips and knees, keeping your lower back arched in.
- C. **Turn, don't twist.** Twisting is not the thing to do. Instead of twisting, turn your whole body in the direction that you want to go. Twisting when carrying a load puts a lot of undo stress on your back.
- D. **Push, don't pull.** Whenever you have to move something that's on a cart, a dolly, or a hand truck, push the load. Pushing puts less strain on your back.
- E. **Don't store heavy objects higher than your waist.** If heavy objects aren't stored higher than your waist than you won't have to lift them higher than your waist. Lifting objects overhead puts a lot of undue stress on your back. It's one of the surest ways to injure your back.
- F. **Lift like a pro and avoid the pain.** Learning how to lift and carry safely is one of the most important things you can do for your back. It's not hard to

put these suggestions to use, and the payoffs will be well worth the time and effort you put into it.

## PROTECTIVE CLOTHING REFERENCE CHART

Note: This is a general reference chart only. Always consult the tool/equipment manual or your supervisor for the required protective clothing before using any tool or equipment.

TOOL/EQUIPMENT	Hard Hat	Goggles	Gloves	Hearing	Mask
LINE TRIMMER		X	X	X	
EDGER		X	X	X	
HEDGE TRIMMER		X	X	X	
CHAIN SAW	X	X	X	X	
BLOWER		X	X	X	X
PRESSURE WASHER			X	X	
POWER AUGER			X	X	
TRENCHER			X	X	
LITTER VACUUM			X	X	
ROTOTILLER			X	X	
PAINT STRIPER		X	X	X	X
MOWERS (WALK BEHIND)		X	X	X	
EQUIPMENT (RIDING)			X	X	
PESTICIDE/HERBICIDES		X	X		X
ELECTRIC POWER TOOLS		X	X	X	X
AR= As recommended in manual					
OTHER TOOLS/EQUIPMENT	AR	AR	AR	AR	AR

## CODES OF SAFE PRACTICES – MAINTENANCE WORKERS

### Electrical Repairs Safety Rules

- A. **Take charge of the source of power.** Disconnect the fixture or equipment from its source of power and make sure it cannot be electrified without your knowledge and consent. Install your own padlock on the circuit breaker panel or lever to ensure that you have control over the electrical supply system. If it is not possible to lock the panel, post a sign stating “Person at Work”. Remove the padlock or sign when the task is completed.
- B. **Do not perform electrical repairs around water.**
- C. **Never put your hands into an area that you cannot see.** Live wires shall be there.
- D. **Always replace a fuse with one that is of the same type and size.**
- E. **All electrical installations should be made in compliance with the National Electric Code.**

### Plumbing Repairs Safety Rules

- A. **Be careful with P.V.C cement.** When using P.V.C cement, make sure the work area is well ventilated and there are not sources of ignition nearby. Always wash your hands after using P.V.C cements and solvents.
- B. **Inspect the immediate work area prior to performing brazing operations.** Ensure that no flammable liquids or combustible materials are present.
- C. **Ensure that a fire extinguisher is available.** If brazing is done in or near wall studs or other flammable material, a Class A portable fire extinguisher should be immediately available.

### Ladder Safety Rules

- A. **Use a straight ladder if you must lean the ladder against a support.** Avoid using an “A” frame ladder in this situation – it’s not the right equipment for the job. Metal ladders must not be used near exposed electrical circuits or power lines. “A” frame ladders are safest if they are ten feet or less in length – never use one over 20 feet long.
- B. **Inspect the ladder before you use it.** No ladder is safe if it is missing rungs, if the rungs or rails are defective, or if it is in a weakened condition. Wood ladders should be inspected for side rails that are cracked or split, and sharp edges or splinters on cleats, rungs or side rails. Make certain spreaders can be locked in place. Be sure straight ladders have safety feet. If a ladder cannot be repaired, dispose of it promptly.

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- B. **Prepare the equipment and yourself for work.** Examine the tools for safety defects before you use them. Check electrical cords for frayed wires and defective plugs. If an extension cord is required, make sure the gauge of wire in the cord is compatible with the power supply and tool. Make sure the ground plug is in place. Examine the tool for cracks and safety defects. Check for loose or missing bolts and knobs. Keep safety guards in place at all times. Wear protective clothing provided by your supervisor and recommended by the equipment manufacturer (See Protective Clothing Reference Chart).
- C. **Avoid hazards while operating equipment.** Clear the work area of trip, slip, and fall hazards and things that might get in your way while working. Designate the work areas with safety cones when possible. Keep a tight grip on the equipment, and position the tool comfortably close to your body. Be mindful of others around you. Always shut off the tool when you are not using it and disconnect it from the power supply.

- D. **Report any inoperative or unsafe equipment to your supervisor.** Take unsafe equipment out of service until it can be repaired or replaced.

## Lifting Rules

It is just as important to keep your body in shape for the task as it is any other tool you use for other jobs. You can injure yourself just as easily lifting light objects as you can lifting heavier ones if you don't lift properly and your "tool" is not in shape for the job. Lifting is a thinking person's job.

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- B. **Use proper body mechanics when lifting.** Stand close to the object with your feet about shoulder width apart. Squat down, bending at the hips and knees. Keep your back straight. As you grip the load, arch your lower back inward by pulling your shoulders back and sticking your chest out with chin tucked in. Be sure to keep the load close to your body. When you set the load down, squat down, bending at the hips and knees, keeping your lower back arched in.
- C. **Turn, don't twist.** Twisting is not the thing to do. Instead of twisting, turn your whole body in the direction that you want to go. Twisting when carrying a load puts a lot of undo stress on your back.
- D. **Push, don't pull.** Whenever you have to move something that's on a cart, a dolly, or a hand truck, push the load. Pushing puts less strain on your back.
- E. **Don't store heavy objects higher than your waist.** If heavy objects aren't stored higher than your waist than you won't have to lift them higher than your waist. Lifting objects overhead puts a lot of undue stress on your back. It's one of the surest ways to injure your back.
- F. **Lift like a pro and avoid the pain.** Learning how to lift and carry safely is one of the most important things you can do for your back. It's not hard to put these suggestions to use, and the payoffs will be well worth the time and effort you put into it.

## Machinery Safety Rules

- A. **Manufacturers supply manuals with machinery.** Read the manuals and become completely familiar with the equipment before using it, paying particular attention to the potential hazards of each piece of machinery. Keep the manuals handy for future reference. Have an experienced

operator provide instructions and a demonstration of the equipment before you use it.

- B. **Learn safeguarding techniques for each machine.** Become familiar with the purpose and nature of each required guard, and how to inspect and use the guards. Do not remove the guards without the approval of the maintenance supervisor.
- C. **Prepare the equipment and yourself for work.** Thoroughly inspect the equipment prior to using it (most equipment manuals have inspection checklists). Make sure all the factory installed safety devices are operating properly, and don't use the equipment if they are not. Immediately report all equipment faults to your supervisor.
- D. **Review the Personal Protective Equipment (PPE) required for safe use of each machine.** Become familiar with and wear the protective clothing provided by your supervisor and recommended by the equipment manufacturer.
- E. **Be aware of the non-mechanical hazards.** Recognize other potential hazards; they include noise (wear hearing protection if recommended), possible chemical splashing, sparking and excessive heat.
- F. **Keep the area in and around the machine neat and well lit.** Poor housekeeping and lighting are factors in a number of machine injuries. Any limitations to vision or mobility are potentially dangerous.
- G. **Do not wear loose fitting clothes or jewelry.** Long hair also needs to be confined.
- H. **Follow lockout/tagout procedures when performing maintenance.** Review the procedures with your supervisor before disconnecting the machine from its source of power. Stay in control of that source of power – through either a lock or tag – while working on the machine.

### Storeroom Safety Rules

An overcrowded, unorganized storeroom is an accident about to happen. A neat, clean storeroom can greatly reduce the potential for accidents.

- A. **Store chemicals safely.** All chemical containers must be properly labeled. Store chemicals according to instructions on container labels. Be aware of where the Material Safety Data Sheets (MSDS) are kept for all the chemicals you use. Store flammable materials in a properly vented flammable liquids cabinet away from sources of ignition like hot water heaters.
- B. **Store your tools safely.** Each tool should have its place in the storeroom. The tools should only be stored after inspecting them for safety hazards and cleaning them. Check electrical tools for frayed wires and defective plugs.

Make sure the ground plug is in place. Cords should be neatly wrapped and secured on the tool. Keep extension cords in good repair.

- C. **Weight can be a safety hazard.** Heavier items should be stored on the lower shelves at about chest height or lower. Be careful not to overload shelves.
  
- D. **Electrical/water heater rooms are not storerooms.** Rooms with electrical panels are not designed as storerooms. However, if electrical rooms must be used for storage, make sure there is clear area at least 36" from electrical panels. Electrical rooms must be free of all liquids. A water heater is a source of ignition. Don't store flammable materials in rooms with water heaters.
  
- E. **Keep it neat.** Keep at least one aisle of your storage areas open at all times. Protruding nails, and torn or sharp corners can cause serious cuts and bruises. Remove or pad them. Be alert to the careless actions of others.

## CODES OF SAFE PRACTICES – SCIENCE DEPARTMENTS

### Classrooms

- A. **When entering different work areas**, familiarize yourself with any required safety precautions. Be aware of work going on around you.
- B. **Report any unsafe conditions or equipment to your supervisor.** Keep horseplay and rough housing away from the job. Practical jokes often become painful injuries.
- C. **Preventing accidents depends mostly on you, THINK SAFETY.** Work with care and good judgment at all times to avoid accidents.
- D. **Report any injuries immediately.** Even small cuts can become seriously infected. Rely on your supervisor's knowledge and experience if you do not understand any rule or work operation.
- E. **Intoxicants and non-prescribed drugs are NOT PERMITTED** and result in disciplinary action. Keep your mind on your job and your temper under control.
- F. **Teachers having specific concerns about safety conditions** related to facilities, equipment, supplies, curriculum, classroom occupant load, etc., should notify their site administrator immediately for assistance in relieving the condition.

### Hazards

- A. **Be sure your footing is well supported before stepping.** Watch out for, slippery spots, spills, loose objects, etc.
- B. **Always have enough light on stairs, aisles, basements, work areas.** Place barricades and or signs to warn of traffic, and chemical dangers, etc. Have warning signs posted at entrance if necessary.
- C. **The use of approved eye protection devices** must be required of all persons performing science activities involving hazards to the eyes. All persons in dangerous proximity to a laboratory activity must also wear approved eye protection devices.
- D. **Wear clothing suitable for weather and your work.** Proper personal protective equipment shall be used whenever mixing, pouring or using chemicals (i.e. eye protection, rubber gloves, apron).
- E. **Chemical Storage.** Chemicals should be stored according to their compatibility group. Chemicals should not be stored directly on the floor. This precaution will prevent contact with water from flooding, mopping, condensation, or the puddling of liquid contents of defective or broken containers around adjacent stored chemicals. Large containers should be

stored on the lowest shelves to minimize the danger of breakage or spillage when being removed or replaced.

- F. **Chemical Labels.** Chemicals must be properly labeled and stored in appropriate containers.
- G. **Material Safety data Sheets.** (MSDS) must be available for all hazardous chemicals.
- H. **Shelves or cabinets** shall be secured firmly to the walls.
- I. **Earthquake lips/barriers** must be in place on storage shelves.
- J. **Flammable liquids.** Use approved storage cabinets for flammable liquids.
- K. **Ventilation.** Ensure that there is adequate ventilation (a fume hood, if needed), isolated from the rest of the building.
- L. **Compressed gas cylinders** are secured upright to the wall, with caps in place. Flammable gases are separated from oxidizing gases by a one-hour firewall or at least 20 feet.
- M. **Experiments.** In an experiment or demonstration involving any flammable liquid (such as alcohol), care must be taken that any flame in the room is an absolutely safe distance from the volatile liquid. Vapors shall even flow along a table or countertop for long distances and then flash back. Beware of gas water heaters in or near science classrooms.
- N. **Utilities.** Teachers should be familiar with the location of all master controls for utilities, especially the master valve in each room for the gas outlets. Mark and/or color-code all services.
- O. **Gas.** The gas at student workstations should be turned off at the teachers main control valve and only be activated for the specific class period of usage.
- P. **Acids.** Water should never be added to concentrated acids. Acids should be stored below waist level.
- Q. **Eyewash Station.** Know the location of your nearest eyewash and safety shower and know how to use them. All emergency eyewash stations and deluge showers should be regularly inspected to ensure proper operation of the equipment. All results should be documented.
- R. **If you spill a chemical on your skin or clothing,** don't wait to see if the chemical will burn. Immediately rinse skin with plenty of water for at least 15 minutes. Remove clothing that has been contaminated and wash it before you put it back on.

- S. **Do not eat, drink, smoke, or store foodstuffs or smoking materials in chemical storage or use areas.** Always wash your hands after handling chemicals and before eating, drinking, or smoking.

## Housekeeping

- A. **Maintain good housekeeping at the job.** Keep materials orderly. Prevent piles from falling or shifting (tie or support if necessary).
- B. **Provide safe access to work areas.** Do not block aisles, traffic lanes, fire exits and keep loose materials off stairs, walkways, ramps, and platforms. Avoid shortcuts, use ramps, stairs, walkways, and ladders.
- C. **Immediately clean up small chemical spills.** Always treat an unidentified liquid in a chemical area as if it were an acid.
- D. **The custodial staff** should be alerted to general hazards they shall encounter in sciences areas and to special situations that arise.

## Lifting Rules

- A. **Before you lift something, prepare yourself and plan the move.** Make sure you are limber and physically fit enough to do the task safely. Size up the load to make sure you can handle it safely. If you think the load is too bulky or too heavy, ask someone to help you or try to break it up into smaller, more manageable loads. Use a hand truck or dolly if necessary. Plan your route and make sure the path is clear of trip, slip, and fall hazards.
- B. **Use proper body mechanics when lifting.** Stand close to the object with your feet about shoulder width apart. Squat down, bending at the hips and knees. Keep your back straight and in a locked position. Be sure to keep the load close to your body. When you set the load down, squat down, bending at the hips and knees, keeping your lower back arched in.
- C. **Turn, don't twist.** Instead of twisting, turn your whole body in the direction that you want to go.
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- D. **Review the Personal Protective Equipment (PPE) required for safe use of each machine.** Become familiar with and wear the protective clothing provided by your supervisor and recommended by the equipment manufacturer.
- E. **Be aware of the non-mechanical hazards.** Recognize other potential hazards; they include noise (wear hearing protection if recommended), possible chemical splashing, sparking and excessive heat.
- F. **Keep the area in and around the machine neat and well lit.** Poor housekeeping and lighting are factors in a number of machine injuries. Any limitations to vision or mobility are potentially dangerous.
- G. **Do not wear loose fitting clothes or jewelry.** Long hair also needs to be confined.
- H. **Follow lockout/tag out procedures when performing maintenance.** Review the procedures with your supervisor before disconnecting the machine from its source of power. Stay in control of that source of power.

## Storeroom Safety Rules

- A. **Store chemicals safely.** All chemical containers must be properly labeled. Store chemicals according to instructions on container labels. Be aware of where the Material Safety Data Sheets (MSDS) are kept for all the chemicals you use. Store flammable materials in a properly vented flammable liquids cabinet away from sources of ignition like hot water heaters.
- B. **Store your equipment safely.** Equipment should have its place in the storeroom. The equipment should only be stored after inspecting them for

safety hazards and cleaning them. Check electrical tools for frayed wires and defective plugs. Make sure the ground plug is in place. Cords should be neatly wrapped and secured on the tool. Keep extension cords in good repair.

- C. **Weight can be a safety hazard.** Heavier items should be stored on the lower shelves at about chest height or lower. Be careful not to overload shelves.
- D. **Electrical/water heater rooms are not storerooms.** Rooms with electrical panels are not designed as storerooms. However, if electrical rooms must be used for storage, make sure there is clear area at least 36" from electrical panels. Electrical rooms must be free of all liquids. A water heater is a source of ignition. Don't store flammable materials in rooms with water heaters.
- E. **Keep it neat.** Keep at least one aisle of your storage areas open at all times. Protruding nails, and torn or sharp corners can cause serious cuts and bruises. Remove or pad them. Be alert to the careless actions of others. Store all items such as hoses, electric extension cords, and ladders on appropriate hangers to reduce the potential trip hazards.

<http://www.sbccd.org/pages/218.asp>

## Hazard Reporting

/pages/226.asp		Hazard Reporting	Environmental, Hk		What_are_you_r
What_are_you_r					

**What are you reporting?**  Safety Hazard  Complaint

Date of Incident :

Your Name (OPTIONAL) :

Phone Number :

Unit, Department, Division:

Site :

Email Address (OPTIONAL):

Confirm Email (OPTIONAL):

Location of Hazard (Including building, floor, and room number) :

Summary of Hazard :

Has any action been taken?

**Do you want to be contacted?**  Yes  No

## Appendix C: Facility Safety Self-Inspection Checklists

## **Abrasive wheel equipment grinders**

- Is the work rest used and adjusted to within  $\frac{1}{8}$  inch of the wheel?
- Is the adjustable tongue on the top side of the grinder used and kept adjusted to within  $\frac{1}{4}$  inch of the wheel?
- Do side guards cover the spindle, nut, flange, and 75 percent of the wheel diameter?
- Are bench and pedestal grinders permanently mounted?
- Do employees always wear ANSI-approved goggles or face shields when grinding?
- Is the maximum RPM rating of each abrasive wheel compatible with the RPM rating of the grinder motor?
- Are fixed or permanently mounted grinders connected to their electrical supply system with metallic conduit or by another permanent wiring method?
- Does each grinder have an individual on/off switch?
- Is each electrically-operated grinder effectively grounded?
- Before new abrasive wheels are mounted, are they visually inspected and ring tested?
- Are dust collectors and powered exhausts provided on grinders used in operations that produce large amounts of dust?
- To prevent coolant from splashing workers, are splash guards mounted on grinders that use coolant?
- Is cleanliness maintained around grinders?

## Chemical exposures

- Is employee exposure to chemicals kept within acceptable levels?
- Are eyewash fountains and safety showers provided in areas where caustic corrosive chemicals are handled?
- Are all employees required to use personal protective clothing and equipment (gloves, eye protection, respirators) when handling chemicals?
- Are flammable or toxic chemicals kept in closed containers when not in use?
- Where corrosive liquids are frequently handled in open containers or drawn from storage vessels or pipelines, are adequate means provided to neutralize or dispose of spills or overflows (properly and safely)?
- Have standard operating procedures been established, and are they being followed when chemical spills are cleaned up?
- Are respirators stored in a convenient and clean location?
- Are emergency-use respirators adequate for the various conditions under which they may be used?
- Are employees prohibited from eating in areas where hazardous chemicals are present?
- Is personal protective equipment provided, used, and maintained whenever necessary?
- Are there written standard operating procedures for selecting and using respirators where needed?
- If you have a respirator protection program, are your employees instructed on the correct usage and limitations of the respirators?
- Are the respirators NIOSH-approved for particular applications?
- Are respirators inspected and cleaned, sanitized, and maintained regularly?
- Are you familiar with the Threshold Limit Value (TLV) or Permissible Exposure Limit (PEL) of airborne contaminants and physical agents used in your workplace?
- Have you considered having an industrial hygienist or environmental health specialist evaluate your work operations?

## Compressors and compressed air

- Are compressors equipped with pressure-relief valves and pressure gauges?
- Are compressor air intakes installed and equipped to ensure that only clean, uncontaminated air enters the compressor?
- Are air filters installed on the compressor intake?
- Are compressors operated and lubricated according to the manufacturers' recommendations?
- Are safety devices on compressed-air systems checked frequently?
- Before any repair work is done on compressor pressure systems, is the pressure bled off and the system locked out?
- Are signs posted to warn of a compressor's automatic starting feature?
- Is the belt drive system enclosed to provide protection on the front, back, top, and sides?
- Do you prohibit directing compressed air toward a person for any reason?
- Are employees prohibited from using compressed air over 29 PSI for cleaning purposes unless they use an approved nozzle with pressure relief and clip guard?
- When using compressed air for work-area cleaning, do employees use personal protective equipment?
- Are high-pressure hoses and connections in good repair?
- Before compressed air is used to empty containers of liquid, are the pressure limits of the containers checked?
- When compressed air is used with abrasive blast cleaning equipment, is the operating valve a type that must be held open manually?
- Is it prohibited to use compressed air to move combustible dust if such action could cause the dust to be suspended in the air and cause a fire or explosion?
- If plastic piping is used, is the plastic approved for air line service? (Some ABS is OK — PVC is not.)

## Compressed gas and cylinders

- Do cylinders with water-weight capacity over 30 pounds equipped have a means for connecting a valve protector or device, or a collar or recess, to protect the valve?
- Are cylinders legibly marked to clearly identify the gas contained?
- Are compressed-gas cylinders stored in areas protected from external heat sources such as flames, intense radiant heat, electric arcs, or high-temperature lines?
- Are cylinders located or stored in areas where they will not be damaged or tampered with by unauthorized persons?
- Are cylinders stored or transported in a manner that prevents them from creating a hazard by tipping, falling, or rolling?
- Are cylinders containing liquefied fuel gas stored or transported so that the safety relief devices are always in direct contact with the vapor spaces in the cylinders?
- Are valve protectors always placed on cylinders when the cylinders are not in use?
- Are all valves closed off before cylinders are moved, when cylinders are empty, and at the completion of each job?
- Are low-pressure fuel-gas cylinders checked periodically for corrosion, general distortion, cracks, or other defects that might indicate a weakness or render them unfit for service?
- Does the periodic check of low-pressure fuel-gas cylinders include inspection of the bottom of each cylinder?
- Are regulator-pressure adjusting screws released when welding or cutting is stopped for an extended period of time?

## Electrical safety

- Are workplace electricians familiar with OR-OSHA electrical safety rules?
  - Do you require compliance with OR-OSHA rules on all contract electrical work?
  - Are all employees required to report as soon as possible obvious hazards to life or property observed concerning electrical equipment or lines?
  - Are employees instructed to make preliminary inspections and/or appropriate tests to determine what conditions exist before starting work on electrical equipment or lines?
  - When electrical equipment or lines are to be serviced, maintained, or adjusted, are necessary switches opened, locked out, and tagged?
  - If portable hand-held electrical tools and equipment are not grounded are they double-insulated?
  - Are electrical appliances such as vacuum cleaners, polishers, and vending machines grounded?
  - Do extension cords have a grounding conductor?
    - Are multiple plug adapters prohibited?
  - Are ground-fault circuit interrupters installed on each temporary 15-, 20-, or 30-ampere, 125-volt AC circuit where construction, demolition, modifications, alterations, or excavations are performed?
- Or*
- Do you have an assured equipment-grounding conductor program?
  - Are all temporary circuits protected by suitable disconnecting switches or plug connectors at the junction with permanent wiring?
  - Do you promptly repair or replace exposed wiring and cords with frayed or deteriorated insulation?
  - Are flexible cords and cables free of splices or taps?
  - Are clamps or other securing means provided on flexible cords or cables at plugs, receptacles, tools, equipment, and is the cord jacket securely held in place?

## **Elevated surfaces**

- Have you posted signs, when appropriate, that show load capacities of elevated floors?
- Are elevated surfaces (more than four feet above the floor or ground) provided with standard guardrails?
- Are all elevated surfaces beneath which people or machinery could be exposed to falling objects provided with standard toeboards?
- Is a permanent means of access/egress provided to elevated work surfaces?
- Is material on elevated surfaces piled, stacked, or racked to prevent it from tipping, falling, collapsing, rolling, or spreading?
- Are dock boards or bridge plates used when transferring materials between docks and trucks or railcars?
- Are dock boards or bridge plates secured in place when they are in use?

## **Emergency action plan**

- Have you developed an emergency-action plan?
- Have emergency-escape procedures and routes been developed and communicated to all employees?
- Do employees who must complete critical plant operations before evacuating know the proper procedures?
- Is the employee alarm system emergency warning recognizable and perceptible above ambient conditions?
- Are alarm systems properly maintained and tested regularly?
- Is the emergency-action plan reviewed and revised periodically?

Do employees know their responsibilities for the following:

- Reporting emergencies?
- Responding to emergency warnings?
- Performing rescue and medical duties?

## Employer posting

- Is the OR-OSHA *Job Safety and Health* poster displayed where all employees are likely to see it?

Are these other notices properly displayed:

- Field Sanitation Notice for farm workers?
- Safety Committee meeting minutes?
- OSHA 300 Summary in February?
- Notice of compensation guarantee contract?
- Are emergency telephone numbers posted where they can be readily used in an emergency?
- Where employees may be exposed to toxic substances or harmful physical agents, has appropriate information concerning employee access to medical and exposure records and material safety data sheets (MSDSs) been made readily available?
- Are signs for exits, room capacity, floor loading, and exposure to X-ray, microwave, or other harmful radiation or substances posted as required?

## Environmental controls

- Are all work areas properly lit?
- Are hazardous substances identified that may cause harm by inhalation, ingestion, skin absorption, or contact?
- Are employees aware of the hazards involved with the various chemicals they may be exposed to in their work environment, such as ammonia, chlorine, epoxies, and caustics?
- Is employee exposure to chemicals in the workplace kept within acceptable levels? Can a less harmful method or product be used?
- Is the work area's ventilation system appropriate for the work being performed?
- Are proper precautions taken by employees handling asbestos and other fibrous materials?
- Are caution labels and signs used to warn of asbestos?
- Is the presence of asbestos determined before the beginning of any repair, demolition, construction, or reconstruction work?
- Are asbestos-covered surfaces kept in good repair to prevent release of fibers?
- Are wet methods used (when practicable) to prevent emission of airborne asbestos fibers, silica dust, and similar hazardous materials?
- Is vacuuming dust with appropriate equipment conducted rather than blowing or sweeping?
- Are grinders, saws, and other machines that produce dust vented to an industrial collector or a central-exhaust system?
- Are all local-exhaust ventilation systems designed and operated properly at the airflow and volume necessary for the application?
  - Are the ducts free of obstructions?
  - Have you ensured that belts are not slipping?
- Is personal protective equipment provided, used, and maintained whenever required?
- Are written standard operating procedures available for selection and use of respirators?

## **Ergonomics: general**

- Can the work be performed without eye strain or glare?
- Can the task be done without repetitive lifting of the arms above the shoulder level?
- Can the task be done without the employee having to hold his or her elbows out and away from the body?
- Can employees keep their hands or wrists in a neutral position when they are working?
- Are mechanical assists available to the worker performing materials-handling tasks?
- Can the task be done without having to stoop the neck and shoulders to view the work?
- Are pressure points on body parts such as wrists, forearms, backs of thighs avoided?
- Can the work be done using the larger muscles of the body?
- Are there sufficient rest breaks, in addition to scheduled rest breaks, to relieve stress from repetitive-motion tasks?
- Are tools, instruments, and machinery shaped, positioned, and handled so that tasks can be performed comfortably?
- Are all pieces of furniture adjusted, positioned, and arranged to minimize strain on the body?
- Are lifts confined within the knuckle-to-shoulder zone?
- Is work arranged so that workers are not required to lift and carry too much weight?
- If workers have to push or pull objects using great amounts of force, are mechanical aids provided?

## **Ergonomics: computer workstations**

### **Work posture**

- Are head and neck are upright or in line with the torso (not bent down or back)?
- Are head, neck, and trunk face forward (not twisted)?
- Is the trunk perpendicular to the floor (may lean back into backrest but not forward)?
- Are shoulders and upper arms are in line with the torso, perpendicular to the floor, and relaxed?
- Are upper arms and elbows are close to the body (not extended outward)?
- Are forearms, wrists, and hands are straight and in line?
- Are wrists and hands are straight (not bent up, down, or sideways)?
- Are thighs are parallel to the floor and the lower legs are roughly perpendicular to floor?
- Are feet resting flat on the floor or supported by a stable footrest?
- Do computer users alternate computer tasks and other activities or take short breaks to reduce fatigue?

### **Chair**

- Does the backrest support the lower back (lumbar area)?
- Does the depth and width of the seat pan accommodate the user (seat pan not too big or small)?
- Is there a space between the seat pan and the back of the knees and lower legs (seat pan not too long)?
- Is the seat pan is cushioned and rounded with a “waterfall” front (no sharp edge)?
- Do armrests, if used, support the forearms and do not restrict movement?

### **Keyboard and pointing device**

- Is the keyboard platform stable and large enough to hold a keyboard and a pointing device?
- Is the pointing device next to the keyboard so it can be operated without reaching?
- Is the pointing device easy to activate and fits the hand comfortably?

## Exit doors

- Are doors required to serve as exits designed and constructed so that the way of exit travel is obvious and direct?
- Are windows that could be mistaken for exit doors made inaccessible by barriers or railing?
- Are exit doors able to open from the direction of exit travel without the use of a key or special knowledge or effort?
- Is a revolving, sliding, or overhead door prohibited from serving as a required exit door?
- When panic hardware is installed on a required exit door, will it allow the door to open by applying a force of 15 pounds or less in the direction of the exit traffic?
- Are doors on cold-storage rooms provided with inside release mechanisms that release the latches and open the doors even they are padlocked or otherwise locked on the outside?
- Where exit doors open directly onto a street, alley, or other area where vehicles may be operated, are adequate barriers and warnings provided to prevent employees from stepping directly into traffic?
- Do doors that swing both directions have viewing panels in each door if they are frequently used?

## Exits

- Are all exits marked with an exit sign and illuminated by a reliable light source if used in darkness?
- Are directions to exits marked with visible signs if the exits are not immediately apparent?
- Are doors, passageways, or stairways that are neither exits nor access to exits, and that could be mistaken for exits, marked “NOT AN EXIT,” or “TO BASEMENT,” “STOREROOM,” and the like?
- Are exit signs provided with the word “EXIT” in lettering at least six inches high and the stroke of the lettering at least  $\frac{3}{4}$ -inch wide?
- Are exit doors side-hinged?
- Are all exits kept free of obstructions and unlocked?
- Are at least two means of egress provided from elevated platforms, pits, or rooms where the absence of a second exit would increase the risk of injury from hot, poisonous, corrosive, suffocating, flammable, or explosive substances?
- Are there sufficient exits to permit prompt escape in emergencies?
- Are the number of exits from each floor of a building and the number of exits from the building itself appropriate for the building occupancy load?
- When workers must exit through glass doors, storm doors, and such are the doors fully tempered and do they meet safety requirements for human impact?

## Fire protection

- If your workplace has 11 or more employees, does it have a written fire-prevention plan?
- Does the plan describe the types of fire protection equipment and systems that are available?
- Have you established practices and procedures to control potential fire hazards and ignition sources?
- Are employees aware of the fire hazards of the materials and processes to which they are exposed?
- If your workplace has a fire alarm system, is it tested at least annually?
- Do metal guards protect sprinkler heads where they could be physically damaged?
- Is proper clearance maintained below sprinkler heads?
- Are portable fire extinguishers provided in adequate numbers and types?
- Are fire extinguishers mounted in readily accessible locations?
- Are fire extinguishers recharged regularly, with dates noted on the inspection tags?
- If employees are expected to use fire extinguishers and fire protection procedures, are they trained?
- If employees are not trained to use fire extinguishers, are they trained to immediately evacuate the building in a fire emergency?

## Flammable and combustible materials

- Is combustible scrap, debris, and waste stored in covered metal receptacles and removed from the work site promptly?
- Are proper storage methods used to minimize the risk of fire and spontaneous combustion?
- Are approved containers and tanks used for the storage and handling of flammable and combustible liquids?
- Are connections tight on all drums and combustible liquid piping (vapor and liquid)?
- Are all flammable liquids kept in closed containers when not in use?
- Are bulk drums of flammable liquids grounded and bonded to containers during dispensing?
- Do storage rooms for flammable and combustible liquids have explosion-proof lights?
- Do storage rooms for flammables and combustible liquids have mechanical or gravity ventilation?
- Are safe practices followed when liquid petroleum gas is stored, handled, and used?
- Are liquefied petroleum storage tanks guarded to prevent damage from vehicles?
- Are all solvent wastes and flammable liquids kept in fire-resistant, covered containers until they are removed from the work site?
- Is vacuuming used rather than blowing or sweeping combustible dust when possible?
- Are fire separators placed between stacked containers of combustibles or flammables to ensure their support and stability?
- Are fuel-gas cylinders and oxygen cylinders separated by distance, fire-resistant barriers, or other means while in storage?
- Are fire extinguishers provided for the type of materials they will extinguish, and placed in areas where they are to be used?

CLASS A: Ordinary combustible materials fires

CLASS B: Flammable liquids, gas, or grease fires

CLASS C: Energized-electrical equipment fires

## **Floor and wall openings**

- Are floor holes or openings guarded by a cover, guardrail, or equivalent on all sides (except at entrance to stairways or ladders)?
- Are toeboards installed around the edges of a permanent floor opening (where persons may pass below the opening)?
- Are skylight screens constructed and mounted to withstand a load of at least 200 pounds?
- Is the glass in windows, doors, and glass walls which may be subject to human impact appropriate for its use?
- Are grates or similar covers over floor openings such as floor drains designed so that the grate spacing will not catch foot traffic or rolling equipment?
- Are unused service pits and portions of such pits covered or protected by guardrails or the equivalent?

## **Hand tools and equipment**

- Are all company- and employee-owned tools and equipment in good working condition?
- Are hand tools such as chisels or punches that develop mushroomed heads reconditioned or replaced as necessary?
- Are broken or fractured handles on hammers, axes, or similar equipment replaced promptly?
- Are appropriate handles used on files and similar tools?
- Do employees use appropriate safety glasses, face shields, and similar equipment when using hand tools or equipment that might produce flying materials or be subject to breakage?
- Are jacks checked periodically to ensure they are in good operating condition?
- Are tool handles wedged tightly in the heads of all tools?
- Are tool-cutting edges kept sharp tools will smoothly without binding or skipping?
- Do employees use eye and face protection when they drive hardened or tempered tools, bits, or nails?

## Hazard communication

- Have you compiled a list of hazardous substances that are used in your workplace?
- Is there a written hazard communication program dealing with material safety data sheets (MSDSs), labeling, and employee training?
- Is someone responsible for MSDSs, container labeling, and employee training?
- Is each container for a hazardous substance (vats, bottles, storage tanks) labeled with product identity and a hazard warning that communicates specific health and physical hazards?
- Is there an MSDS readily available for each hazardous substance used?
- Do you inform other employers whose employees share a work area with your employees, where hazardous substances are used?
- Do you have an employee training program for hazardous substances?

Does this program include the following:

- An explanation of what an MSDS is, and how to obtain and use one? An explanation of “Right to Know?”
- The contents of the MSDS for each hazardous substance or class of substances?
- Informing employees where they can review the employer’s written hazard communication program, and where hazardous substances are located in work areas?
- The physical and health hazards of substances in the work area, how to detect their presence, and specific protective measures to be used?
- Hazard communication program details, including labeling system and MSDS use?
- How employees will be informed of hazards of non-routine tasks and hazards of unlabeled pipes?

## Industrial trucks

- Do industrial truck operators meet the requirements for industrial truck operator training adopted in May 1999?
- Is substantial overhead protective equipment provided on high-lift rider equipment?
- Are the required lift-truck operating rules posted and enforced, and is the capacity rating posted in plain view of the operator?
- Is directional lighting provided on each industrial truck that operates in an area with less than two foot-candles per square foot of general lighting?
- Does each industrial truck have a warning horn, whistle, gong, or other device that can be clearly heard above the normal noise in the operation area?
- Are the brakes on each industrial truck capable of bringing the vehicle to a complete and safe stop when fully loaded?
- Will the industrial truck's parking brake effectively prevent the vehicle from moving when unattended?
- Are industrial trucks operating in areas of flammable gases or vapors, combustible dust, or ignitable fibers approved for such locations?
- Are motorized hand and hand/rider trucks so designed that the brakes are applied and power to the drive motor shuts off when the operator releases his/her grip on the device that controls the travel?
- Are industrial trucks with internal combustion engines that are operated in buildings or enclosed areas checked to ensure such operations do not cause harmful concentrations of dangerous gases or fumes?

## Infection control

- If employees could be exposed to infectious agents in body fluids, have potential exposure events been identified and documented?
- Has a training and information program been provided for employees who could be exposed to infectious agents in body fluids?
- Have infection-control procedures been instituted where appropriate, such as ventilation, universal precautions, workplace practices, and personal protective equipment?
- Are employees aware of specific workplace practices for hand washing, handling sharp instruments, handling laundry, disposal of contaminated materials, and reusable equipment?
- Is personal protective equipment provided and available to employees who need it?
- Is necessary equipment such as mouthpieces, resuscitation bags, and other ventilation devices provided for administering mouth-to-mouth resuscitation?
- Are supplies and equipment — such as hand washing sinks, biohazard tags and labels, sharps containers, and detergents or disinfectants — available to allow employees to comply with workplace practices?
- Are environmental and working surfaces and equipment cleaned and disinfected after contact with blood or potentially infectious materials?
- Is infectious waste placed in closable, leak-proof containers, bags, or puncture-resistant holders with proper labels?
- Has medical surveillance including HBV evaluation, antibody testing, and vaccination been made available to potentially exposed employees?

Does medical surveillance cover the following:

- Universal precautions?
- Personal protective equipment?
- Workplace practices, which should include blood drawing, room cleaning, laundry handling, and cleanup of blood spills?
- Needlestick exposure and management?
- Hepatitis B vaccination?

## **Ladders: portable**

- Are all ladders in good condition, joints between steps and side rails tight, all hardware and fittings securely attached, and moveable parts operating freely without binding or undue play?
- Are there non-slip safety feet on all ladders except step ladders?
- Are ladder rungs and steps free of grease and oil?
- Are employees prohibited from placing a ladder in front of doors opening toward the ladder except when the door is blocked open, locked, or guarded?
- Are employees prohibited from placing ladders on boxes, barrels, or other unstable bases?
- Are employees instructed to face the ladder when ascending and descending?
- Are employees prohibited from using ladders that are broken, missing steps, rungs, cleats, broken side rails, or other faulty parts?
- Are employees instructed not to use the top step of ordinary stepladders as a step?
- When portable rung ladders are used to gain access to elevated platforms, roofs, and the like, does the ladder always extend at least three feet above the elevated surface?
- Do you require the users of portable rung or cleat-type ladders to place the base so that slipping will not occur or to lash or otherwise hold the ladder in place?
- Do portable metal ladders have legible signs reading “CAUTION — Do Not Use Around Electrical Equipment” or equivalent wording?
- Are the rungs of ladders uniformly spaced at 12 inches, center to center?

## Lockout and tagout

- Is all machinery or equipment capable of movement de-energized or disengaged and locked out during cleaning, servicing, adjusting, or setup?
- Do you prohibit locking out control circuits instead of locking out main power disconnects?
- Are all control valve handles provided with a means of lockout?
- Does the lockout/tagout procedure require that stored (potential) energy be released or blocked before equipment is locked-out for repairs?
- Are appropriate employees provided with individually keyed personal safety locks?
- Are employees required to maintain control of their keys while they have safety locks in use?
- Do you require employees to check the safety of the lockout by attempting to start up after making sure no one is exposed?

When the power-disconnecting means does not also disconnect the electrical control circuit:

- Are appropriate electrical enclosures identified?
- Are means provided to ensure the control circuit can also be disconnected and locked out?

## Machine guarding

- Is there an employee training program for safe methods of machine operation?
- Is there adequate supervision to ensure that employees follow safe machine operating procedures?
- Is there a regular program of safety inspection for machinery and equipment?
- Is all machinery and equipment clean and properly maintained?
- Is sufficient clearance provided around and between machines to allow for safe operation, setup, servicing, material handling, and waste removal?
- Is equipment and machinery securely placed and anchored when necessary to prevent tipping or other movement that could result in personal injury?
- Is there a power shutoff switch within reach of the operator's position at each machine?
- Are the noncurrent-carrying metal parts of electrically-operated machines bonded and grounded?
- Are foot-operated switches guarded or arranged to prevent accidental actuation by personnel or falling objects?
- Are manually operated valves and switches that control the operation of equipment and machines clearly identified and readily accessible?
- Are all emergency stop buttons colored red?
- Are all pulleys and belts (within seven feet of the floor or working level) properly guarded?
- Are all moving chains and gears properly guarded?
- Are methods provided to protect the operator and other employees in the machine area from hazards created at the point of operation, ingoing nip points, rotating parts, flying chips, and sparks?
- Are machinery guards secured and arranged so they do not present a hazard in their use?
- If special hand tools are used for placing and removing material, do they protect the operator's hands?

## Materials handling

- Are materials stored so that they prevent sprains or strains when employees retrieve them?
- Is there a safe clearance for moving equipment through aisles and doorways?
- Are aisles permanently marked and kept clear to allow safe passage?
- Are motorized vehicles and mechanized equipment inspected daily or before use?
- Are vehicles shut off and brakes set before loading and unloading?
- Are containers of combustibles or flammables properly stacked and stabilized when they are being moved?
- Are trucks and trailers secured from movement during loading and unloading?
- Are dock boards (dock plates) used during loading and unloading operations?
- Are dock plates and loading ramps adequately constructed and maintained to support imposed loads?
- Are hand trucks maintained in safe operating condition?
- Are chutes equipped with side boards of sufficient height to prevent materials from falling off?
- Are chutes and gravity-roller sections firmly placed or secured to prevent displacement?
- At the delivery end of rollers or chutes, are provisions made to brake the movement of materials?
- Are materials handled at a uniform level to prevent lifting or twisting injuries?
- Are material-handling aids used to lift or transfer heavy or awkward objects?
- Are pallets usually inspected before loading or moving them?
- Do you use hooks with safety latches or other devices when hoisting materials, so that slings or load attachments cannot accidentally slip off the hoist hooks?
- Are securing chains, ropes, chokers, or slings adequate for the job?

## **Medical services and first aid**

- Have you developed an emergency medical plan?
- Are emergency phone numbers posted?
- Are first-aid kits with necessary supplies easily accessible to each work area, periodically inspected, and replenished as needed?
- Are means provided for quick drenching or flushing of the eyes and body in areas where caustic or corrosive liquids or materials are handled?

## **Noise: hearing conservation**

- Are there areas in your workplace where continuous noise levels exceed 85 dBA?
- Are noise levels measured using a sound-level meter or an octave band analyzer, and are you keeping records of these levels?
- Have you tried isolating noisy machinery from the rest of your operation?
- Have engineering controls been used to reduce excessive noise?
- Where engineering controls are not feasible, are administrative controls used to minimize employee exposure to noise?
- Is there a preventive health program that educates employees about safe levels of noise and exposure, effects of noise on their health, and use of personal protection?
- Are employees who are exposed to continuous noise above 85 dBA retrained annually?
- Have you identified and posted work areas in which noise levels make voice communication difficult?
- Does every employee working in areas where noise levels exceed 90 dBA use approved hearing protection equipment (noise attenuating devices)?
- Are employees properly fitted and instructed in the proper use and care of hearing protection?
- Are employees who are exposed to continuous noise above 85 dBA given periodic audiometric testing to ensure that you have an effective hearing-protection system?

## Personal protective equipment (PPE)

- Have you assessed workplace hazards that might require PPE and reviewed related injuries?
- Has the assessment been documented?
- Does the documentation identify the workplace evaluated?
- Has training been provided to each employee who is required to wear PPE?
- Has the training been documented?
- Are protective goggles or face shields provided to employees and worn when there may be danger of flying material or caustic or corrosive materials?
- Are ANSI-approved safety glasses worn at all times in areas where there is risk of eye injury?
- Are protective gloves, aprons, or shields provided to employees for protection against cuts, corrosive liquids, and chemicals?
- Are hardhats provided and worn where there is a danger of falling objects?
- Are hardhats inspected periodically for damage to the shell and the suspension system?
- Do employees exposed to vehicular traffic wear high visibility garments that make them stand out from their surroundings?
- Do workers wear reflective garments at night?
- Are appropriate respirators provided for regular or emergency use where they are necessary?
- Is there a written respirator program?
- Are the respirators inspected before and after each use?
- Is a written record kept of all inspection dates and findings?
- Have all employees been trained in work procedures, and proper use and maintenance of protective clothing and equipment for cleaning up spilled toxic or other hazardous materials or liquids?

## **Piping systems: identification**

- When nonpotable water is piped through a facility, are outlets or taps posted to alert employees that the water is unsafe and not to be used for drinking, washing, or personal use?
- Is each pipeline identified when hazardous substances are transported through above ground piping?
- Have asbestos-covered pipelines been identified?
- When pipelines are identified by colored paint, are all visible parts of the line well-identified?
- When pipelines are identified by colored bands or tape, are they identified at reasonable intervals, and at each outlet, valve, or connection?
- When pipelines are identified by color, is a color code posted in on the pipeline where employees are likely to need it and could be confused by the hazards?
- When the contents of pipelines are identified by name or by abbreviation, is the information readily visible on the pipe near each valve or outlet?
- When tags identify pipelines carrying hazardous substances, are the tags constructed of durable material, the message clearly and permanently distinguishable, and tags installed at each valve or outlet?
- When electricity, steam, or other external sources heat pipelines, are suitable warning signs or tags placed at unions, valves, or other serviceable parts of the system?

## Recordkeeping

- Are all occupational injuries and illnesses, including those involving loss of life, loss of consciousness, loss of time from work, and those requiring treatment other than first aid, recorded as required on the OSHA Form 300?
- Are copies of OSHA Form 300 and First Report of Injury, Form 801, kept for five years?
- Are employee's medical records and records of exposure to hazardous substances or harmful physical agents current?
- Have arrangements been made to maintain required records for the legal period for each type of record? (Some records must be maintained for at least 40 years.)
- Are operating permits and records current for elevators, pressure vessels, and liquefied petroleum gas tanks?
- Are employee safety and health training records maintained?
- Are safety inspections and corrections documented and maintained?

## Safety committees

- Is the safety committee composed of an equal number of employer and employee representatives?
- Are employee representatives volunteers or elected by their peers?
- For employers of twenty or more employees, are there at least four members on the safety committee?
- Does the safety committee elect the chairperson?
- Are safety committee members compensated at their normal wages during safety committee training and meetings?
- Do employee representatives serve terms that last at least one year?
- Are terms of service alternated or staggered so that at least one experienced member is serving on the committee?
- Are reasonable efforts made to ensure that committee members represent the major work activities of the business?
- Does the safety committee hold regular meetings at least once a month except months when workplace inspections are performed?
- Does the safety committee follow a written agenda?
- Are minutes kept at each meeting?
- Are the minutes available to all employees?
- Are the minutes maintained for at least three years?
- Are all reports, evaluations, and recommendations of the safety committee included in the safety committee minutes?
- Has a reasonable time been set within which your employer must respond in writing to safety committee recommendations?
- Has the safety committee set up a system for collecting safety-related suggestions, reports of hazards, or other information directly from those involved in workplace operations?
- Is such information reviewed during the next safety committee meeting and recorded in the minutes?
- Does the safety committee assist your employer in evaluating the workplace safety and health program?

## **Safety and health program**

### **Management commitment**

*Business owners and managers: Demonstrate commitment to a safe and healthful workplace by doing the following:*

- Develop a fair, effective safety-and-health policy.
- Follow safety and health rules and lead by example.
- Attend safety-committee meetings, review meeting minutes, and act on safety-committee recommendations.
- Provide employees with the authority and resources they need to carry out their safety and health responsibilities.
- Allocate adequate resources to support the safety-and-health effort.
- Provide appropriate safety-and-health training to employees.
- Acknowledge employee participation in safety-and-health activities.

### **Accountability**

*Business owners and managers: Strengthen accountability by doing the following:*

- Enforce safety-and-health policy.
- Develop business rules that state safe work practices.
- Hold supervisors accountable for enforcing safe work practices.
- Include employees' safety-and-health responsibilities in their job descriptions and performance evaluations.
- Give employees enough authority and training to fulfill their responsibilities.
- Develop a clear, written disciplinary policy describing workplace safety expectations that apply to all employees.
- Establish a recognition program that rewards employees for outstanding contributions to the safety effort.

### **Employee involvement**

*Business owners and managers: Involve employees in the safety-and-health effort by encouraging them to do the following:*

- Suggest ways to help develop a safety-and-health policy or improve an existing one.
- Recommend resources necessary to achieve safety and health goals.

## Spray finishing operations

- Do you ensure adequate ventilation before starting spray finishing operations?
- Do you use mechanical ventilation when spraying in enclosed areas?
- When you use mechanical ventilation during spraying operations, do you ensure that it will not recirculate contaminated air?
- Is the spray area free of hot surfaces?
- Is the spray area at least 20 feet from flames, sparks, operating electrical motors, and other ignition sources?
- Are the portable lamps used to illuminate spray areas suitable for use in a hazardous location?
- Is approved respiratory equipment provided and used during spraying operations?
- Do solvents used for cleaning have a flash point of 100°F or more?
- Are fire-control sprinkler heads kept clean?
- Are “NO SMOKING” signs posted in the spray areas, paint rooms, paint booths, and paint storage areas?
- Is the spray area kept clean of combustible residue?
- Are spray booths constructed of metal, masonry, or other substantial noncombustible material?
- Are the spray booths’ floors and baffles noncombustible and easily cleaned?
- Is infrared drying apparatus kept out of the spray area during spraying operations?
- Is the spray booth completely ventilated before the drying apparatus is used?
  - Is the electric drying apparatus properly grounded?
  - Do all drying spaces have adequate ventilation?
- Are lighting fixtures for spray booths located outside the booth, and the interior lighted through sealed clear panels?
- Are the electric motors for exhaust fans placed outside booths or ducts?
- Are belts and pulleys inside the booth fully enclosed?

## Stairs and stairways

- Are standard stair rails and handrails present on all stairways having four or more risers?
- Are all stairways at least 22 inches wide?
- Do stairs have at least 6.5 feet of overhead clearance?
- Do stairs angle no more than 50 degrees and no less than 30 degrees?
- Are risers on stair steps uniform, with no riser more than 9.5 inches?
- Are steps on stairs and stairways provided with a slip-resistant surface?
- Are stairway handrails 30-42 inches above the leading edge of stair treads?
- Do stairway handrails have at least three inches' clearance between the handrail and the surface they are mounted on?
- Are stairway handrails capable of withstanding a load of 200 pounds applied in any direction?
- Where stairs or stairways exit directly into an area where vehicles may be operated, have you provided adequate barriers and warnings to prevent employees from stepping into traffic?

## **Tools and equipment: portable power-operated**

- Do grinders, saws, and similar equipment have appropriate safety guards?
- Are power tools used with the shield or guard that the manufacturer recommends?
- Are portable circular saws equipped with guards above and below the base shoe?
- Are circular saw guards checked to ensure guarding of the lower blade portion?
- Are rotating or moving parts of equipment guarded to prevent physical contact?
- Are all cord-connected, electrically-operated tools and equipment either grounded or of the approved double-insulated type?
- Are effective guards in place over belts, pulleys, chains, and sprockets on equipment such as concrete mixers, air compressors, and the like?
- Are portable fans provided with full guards having openings of  $\frac{1}{2}$  inch or less?
- Is hoisting equipment available and used for lifting heavy objects, and are hoist ratings and characteristics appropriate for the task?
- Are ground-fault circuit interrupters (on all temporary electrical 15-, 20-, and 30-ampere circuits) used during periods of construction?  
*Or*  Is there an assured equipment-grounding conductor program in place during periods of construction?
- Are pneumatic and hydraulic hoses on power-operated tools checked regularly for deterioration or damage?

## **Transportation: employees and materials**

- Do employees who operate vehicles on public thoroughfares have operator licenses?
- Are motor vehicle drivers trained in defensive driving and proper use of the vehicle?
- Are employees required to use seatbelts?
- Does each van, bus, or truck used to transport employees have an adequate number of seats?
- When employees are transported by truck, are safeguards provided to prevent them from falling from the vehicle?
- Are vehicles equipped with lamps, brakes, horns, mirrors, windshields, and turn signals that are in good repair?
- Are transport vehicles equipped with handrails, steps, stirrups, or similar devices so employees can safely mount or dismount?
- Is a fully-charged fire extinguisher, in good condition, with at least 4 B:C rating maintained in each employee transport vehicle?
- When sharp-edged cutting tools are carried in passenger compartments of employee transport vehicles, are they placed in closed boxes or containers that are secured in place?
- Are employees prohibited from riding on top of any load that can shift, topple, or otherwise become unstable?
- Are materials that could shift and enter the cab secured or barricaded?

## Walkways

- Are aisles and passageways kept clear and at least 22 inches wide?
- Are aisles and walkways appropriately marked?
- Are wet surfaces covered with non-slip materials?
- Are openings or holes in the floors or other walking surfaces repaired or otherwise made safe?
- Is there a safe clearance for walking in aisles in which vehicles operate?
- Are materials and equipment stored so sharp objects do not obstruct the walkway?
- Are changes of direction or elevation easily identified?
- Do aisles or walkways near moving or operating machinery, welding, and similar operations keep employees away from hazards?
- Is there floor-to-headroom height of at least 6.5 feet provided for the entire length of any walkway?
- Are standard guardrails provided wherever aisle or walkway surfaces are elevated more than four feet above floor or ground?
- Are bridges provided over conveyors and similar hazards?

## **Welding, cutting and brazing**

- Do you allow only authorized and trained personnel to use welding, cutting, or brazing equipment?
- Are compressed gas cylinders regularly examined for signs of defect, deep rusting, or leakage?
- Are cylinders kept away from sources of heat?
- Are employees prohibited from using cylinders as rollers or supports?
- Are empty cylinders appropriately marked, their valves closed, and valve-protection caps placed on them?
- Are signs posted that read “DANGER — NO SMOKING, MATCHES, OR OPEN LIGHTS,” or the equivalent?
- Are cylinders, cylinder valves, couplings, regulators, hoses, and apparatus kept free of oily or greasy substances?
- Unless secured on special trucks, are regulators removed and valve-protection caps put in place before moving cylinders?
- Do cylinders without fixed hand wheels have keys, handles, or nonadjustable wrenches on stem valves when in service?
- Are liquefied gases stored and shipped with the valve end up and with valve covers in place?
- Before a regulator is removed, is the valve closed and gas then released from the regulator?
- Is open circuit (no load) voltage of arc welding and cutting machines as low as possible and not more than the recommended limit?
- Are electrodes removed from holders when not in use?
- Are employees required to shut off the electric power to the welder when no one is using it?
- Is suitable fire-extinguishing equipment available for immediate use?
- Are welders forbidden to coil or loop welding electrode cable around their bodies?

## **Work environment: general**

- Are all work areas clean and orderly?
- Are walking surfaces dry or slip-resistant?
- Are spilled materials or liquids cleaned up immediately?
- Is combustible scrap, debris, and waste safely contained and removed from the site promptly?
- Are covered metal waste cans used for oily and paint-soaked waste?
- Is the appropriate number of toilets and washing facilities provided?
- Are toilets and washing facilities sanitary?
- Are work areas adequately lighted?

## **Ventilation for indoor air quality**

- Does the HVAC system provide at least the quantity of outdoor air designed into the system at the time the building was constructed?
- Is the HVAC system inspected at least annually and maintained so that it is clean and efficient?
- Are efforts made to purchase furnishings or building treatments that do not give off toxic or offensive vapors?
- Are indoor air quality complaints investigated, and are the results conveyed to workers?