

CUSTODIAL SAFETY PROCEDURES

The Custodial Section provides the cleaning and upkeep for the buildings on campus. Custodians may encounter a variety of safety hazards. This section will help custodians avoid accidents.

EQUIPMENT SAFETY

Equipment, which is necessary to get almost any job done correctly and efficiently, can be harmful if used improperly or with incorrect techniques. This section outlines certain guidelines and provides helpful hints that will increase job performance. At the same time, this information can greatly decrease the potential for accidents and possible injuries. This section will also point out some hazards that are not so obvious. In most cases the recommendations take only minutes to complete. A few moments of caution will avoid costly accidents.

PROCEDURAL SAFETY

Custodial Closets

Custodial closets must have the following safety items and meet these safety guidelines:

- ◆ Material Safety Data Sheets (MSDS) for all chemicals stored in the closet, or written instructions or map of the location within the building where the MSDS can be found.
- ◆ Safety goggles or glasses.
- ◆ Rubber gloves.
- ◆ "Wet floor" signs or the location within the building where they can be found.
- ◆ A measuring cup.
- ◆ Mixing station.
- ◆ Earplugs.

Custodial closets must also meet the safety guidelines below:

- ◆ All chemicals must be stored at eye level or below.
- ◆ All containers must be properly labeled.
- ◆ Wet mops must be hung up to dry.
- ◆ Mop buckets must be empty - no standing water or chemicals.
- ◆ Food cannot be stored near chemicals.
- ◆ Equipment cords cannot be frayed or have exposed bare wires.

Wet Mop and Mop Bucket with Wringer

- ◆ A wet area can be a potentially hazardous situation. The hazard can be greatly reduced by exercising simple precautions and proper work methods. Slipping is a major cause of knee and back injuries. Wear shoes with non-slip soles when working on wet floors.
- ◆ Protect others from slipping by marking the area to be mopped with appropriate "Wet Area" warning signs before beginning work.
- ◆ Have a rubber, non-slip handgrip on the bucket wringer handle. This makes it easier to wring the mop and reduces the risk of injuries to hands, wrists, or backs caused by a hand slipping off the handle.
- ◆ Leave the mop bucket in a place where it can be seen. Don't leave it in a hidden or potentially dangerous place (e.g., behind furniture or doors, around corners, or at the top or bottom of stairs).

- ◆ When rinsing a mop in the mop bucket, avoid splashing dirty water or chemical solutions on clothes, hands, or in eyes. Goggles, safety glasses with side shields, or full-face masks should be worn.
- ◆ Mopping puts excess stress on the back, especially if done improperly. To avoid this type of stress, use a lightweight mop, if possible, and hold the handle in such a way that the back is fairly straight and free from strain. Take an extra step to avoid overreaching. Refer to GENERAL WORK RULES (Chapter 2, page 6, Lifting, Carrying, and Handling Safety) of this manual.
- ◆ Rinse the mop and bucket thoroughly after mopping any type of chemical spill. This should be done only after the chemical has been identified. If the chemical cannot be identified, contact your supervisor and Environmental Health Services first before proceeding with a clean-up.

Push Broom or Dust Mop

Generally treat push brooms and dust mops with the same care as wet mops. The following added precautions should be noted:

Backpack

- ◆ Check the vacuum for bag, filters
- ◆ Check the cord for damage and the prongs
- ◆ Make sure you have a pig tail with the vacuum
- ◆ Check your wands/vacuum heads for damage or wear
- ◆ Check your harness for proper fit or any damage
- ◆ Report any and all damage to machine to supervisor
- ◆ Never unplug any equipment in offices or labs
- ◆ Never use vacuum on any type of liquids
- ◆ Always snap the waist belt for proper wear
- ◆ When finished with machine, always change out the bag
- ◆ Wipe down the outside of machines
- ◆ Store properly: wrap cord, change filter if needed, set machine on floor with cord and wand
- ◆ The P.M. crew will be responsible to wash out the inner filter bag on Fridays

EZ Riders Scrubbers

- ◆ This machine will provide excellent service if operated and maintained by following the manual
- ◆ No one will be allowed to operate this machine unless they first go through the training and pass the qualifications.
- ◆ Daily maintenance and checkups of machine will keep it in good working condition
- ◆ After 200 hours, check batteries for loose connections, clean batteries' tops, terminals, and cable clamps and level of electrolyte in the cells
- ◆ Always use distilled water for batteries
- ◆ After using – always plug machine into charger; make sure your charger is unplugged from wall before plugging in connector to machine. Then plug into the wall outlet.
- ◆ Make sure to empty all water from holding tanks and leave lid off to air dry.
- ◆ Check your squeegee for damage; report damage to supervisor immediately
- ◆ Check your brushes, or pads for wear or damage; report to supervisor immediately
- ◆ When in use, make sure safety signs are posted at all times
- ◆ Be aware of your surrounding and people at all times (no head phones at any time)
- ◆ Stay six (6) inches away from all hallway walls
- ◆ Before transporting, make sure you remove both squeegee and pad plates (always)
- ◆ When storing, make sure you follow the instructions regarding the following: empty the tanks, charging the batteries, wiping down the main body of the machine. Wipe down squeegee and check pads or brushes

Machinery

See GENERAL WORK RULES (Chapter 2, page 9, General Equipment Safety) of this manual.

Buffer

The buffer is more specialized than most custodial machines or tools. Care must be exercised when operating this piece of equipment. Buffers are very powerful machines. When they are operating smoothly, it is easy to forget how destructive they can be if they get out of control.

- ◆ Before using the buffer, make sure that the drive plate and buffing pad are securely attached. Unplug the buffer before setting the handle, drive plate, or pad. Always return the buffer to an upright position before plugging it in.
- ◆ Never leave the buffer with the handle in a horizontal position. This presents a tripping hazard. Store the buffer in an upright position, as well, with the drive plate and buffing pad removed.
- ◆ Control the buffer by using both hands. This will help to avoid damage to walls, furniture, and personnel.
- ◆ Keep the buffing pads clean. This makes the buffer easier to control, and prevents sharp objects from sticking to the pad thus damaging the floor. Be careful when operating under desks, chairs, etc., where the buffer can get caught.
- ◆ When stripping a floor, walk on the area that has already been scrubbed, if possible. The floor can be very slippery.

High-Speed Finishers

- ◆ High-speed buffers are easier to control but are more powerful. The increase in power is accompanied with an increase in danger. It is important to keep an eye out for uneven floor tiles or loose floor boards. If the buffer catches an edge of a floor tile or floor board, it can pull up the tiles or tear the boards from the walls.

Wet or Dry Vacuums

Even a vacuum can be a safety hazard if not handled properly.

Dry Vacuum:

- ◆ Check the vacuum bag before each use
- ◆ It should be in proper working condition before using the vacuum
- ◆ Know your machine
- ◆ Follow proper training techniques and operating needs
- ◆ Dry-check vacuum bag before each use – it should be in proper working condition before using the vacuum
- ◆ Make sure the hose and wand and vacuum head is in good working order
- ◆ Check cord for any damage, check prongs on the plug-in, and check pigtail on the machine
- ◆ If any of the above is missing, notify your supervisor immediately
- ◆ Always empty the recovery tank after each use
- ◆ After use, always clean inside and outside of body of the machine and roll cord or hose up

Wet Vacuum:

- ◆ **Never vacuum up flammable liquids**
- ◆ Remove the dry vacuum bag
- ◆ Check for Squeegee, hose, cord, and wet floor tool
- ◆ Check for the float in the main body of the machine and make sure it is attached
- ◆ When running the machine, if it starts to foam, use carpet de-foamer (1 cap full)
- ◆ To empty the fill tank, you can use the pump-out feature

- ◆ When storing, rinse the recovery tank and wipe down the outside of the machine
- ◆ Rinse off the squeegee and rinse out hose if used, and store with the machine
- ◆ Wrap cord with pigtail and store with the lid propped open
- ◆ Make sure all parts are with the machine

Cleaning Solutions

The cleaning solutions used in custodial work contain chemicals that are harmful if splashed in eyes, on skin, or inhaled. When various chemicals are left out carelessly or improperly sealed they pose a threat to employees. Chemicals should be stored at or below eye level; it is important to know what the chemicals are and what to do in case of an accident involving them.

- ◆ Know the nature of the chemicals being used. If you have any questions, talk to your supervisor or refer to the **Material Safety Data Sheets (MSDS)** for chemicals. If chemicals should get splashed in your eyes or on your skin, it is important to know what to do to neutralize the chemical and prevent further harm.
 - ◆ Read and know what the warnings on chemical containers stand for and follow the precautions associated with each warning.
 - Danger
 - Warning
 - Caution
 - Hazard
- ◆ Wear protective gear when working with chemicals. Goggles and gloves are the best way to prevent a chemical spill or splash from causing serious bodily harm.
- ◆ Store all chemicals in an approved, clearly labeled, properly sealed container at or below eye level.
- ◆ Do not dispose of a chemical unless you know the procedure required to properly dispose of it and its container. Triple rinse all chemical containers before disposing of them.
- ◆ If a chemical is found in the area and the contents are uncertain, leave it alone. If it has spilled or is unsealed, do not clean it up, do not put a lid on it, and do not touch it until it has been accurately identified. If you have questions, leave the area immediately and contact your supervisor.
- ◆ If you smell anything suspicious, clear the area, and report the potential hazard to your supervisor immediately. Do not try to figure out what the smell is or what is emitting the odor.

Trash Removal

- ◆ Most of the trash is deposited either on the street curbs or on building sites
- ◆ There is a time frame for both days and night for the deposits

Unfortunately, not everyone complies with proper disposal procedures. Never assume that these procedures have been followed.

- ◆ If the trash looks suspicious, do not reach into a trash container to get something out. Empty the whole liner into the trash cart. Glass disposed of improperly can cause lacerations, so we do not place glass in trash containers (see Glass Bins section, page 5). Chemicals disposed of improperly can get in an open wound or cause skin or eye irritation, or a more serious injury.
- ◆ Be careful at all times climbing steps to trash bins or working around the bin. Rain, snow, and

ice make the area, including the steps, very slippery.

- ◆ Secure the door latch on the trash bin when finished. Report any dumpsters in need of repair to your supervisor.
- ◆ Put bags of trash in the proper areas.
- ◆ If anything is found in the trash that may not be safe to dispose of in the bin, do not empty the trash!!!
- ◆ If you see anything suspicious or hazardous in the trash bins, report it immediately to Environmental Health Services or the Colorado State University Police Department.
- ◆ The majority of back injuries sustained by the department are due to improper lifting during trash removal. Large trash bags are not to be stuffed until completely full. Limit bag contents to no more than 35 gallons (half-full on a 70 gallon bag). Private collection companies do not allow larger than 33 gallon bags. Custodial currently uses the following trash bag sizes 15" x 9" x 32" (i.e., medium size trash receptacles), 26" x 24" x 48" (i.e., trash carts), 12" x 8" x 21" (i.e., office trash containers). The cost of numerous trash bags is much less than the price of a back injury. ***For the sake of safety, please refer to Chapter 2-8 for guidelines for lifting safety while on the job.***

Cleaning up Broken Glass or Sharp Objects

- ◆ Report any broken object, whether broken by you or not, to your supervisor before cleaning it up. Wear gloves to pick up the large pieces first. Put them in a puncture-proof container for disposal, not in a trash liner. Then, vacuum the surface to get the remaining pieces.

Glass Bins

- ◆ Glass bins are located in the buildings that generate glass, pipettes, needles, etc. (such as A/Z and Chem etc.)
- ◆ Custodial has designated red bins for the above items.
- ◆ It is the labs' responsibility to box, tape, and dispose of these items in the red bins
- ◆ If glass or other items are found in the trash containers, **DO NOT EMPTY THE CANS**. Notify your supervisor and they will notify the lab personnel
- ◆ The custodian's job is making sure that the bins are placed properly for ISW staff to empty
- ◆ Custodians should be well versed with the new guidelines concerning Laboratory Sharps Waste Handling Policy (see following section).

LABORATORY SHARPS WASTE HANDLING POLICY (Rev. 12/7/01)

The Building Services Division comprises both Custodial Services and Integrated Solid Waste operations. The division handles waste from the standpoint of individual generation to the approved waste or recycle containers. The only exception to that service is in handling waste streams that fall privy to regulations interpreted, defined, and enforced by the Environmental Health Services (EHS) Department. Many of those regulations are directed at laboratory operations.

Recent negotiations between lab managers and their department, Building Services, EHS, and the Larimer County Landfill have resulted in the changes defined by this policy. The purpose of these negotiations about sharps handling and disposal was to resolve four issues:

1. to ensure that CSU meets all applicable regulations,
2. to meet Larimer County requirements for material acceptance at the landfill,
3. to define Custodial and ISW responsibilities in sharps waste handling and reduce the number of employee injuries in handling sharps waste, and

4. to define lab users/managers responsibilities in handling lab sharps waste.

Building Service's custodial personnel will move new, dedicated, and marked central collection bins to permanent locations for sharps waste pick up points for the ISW personnel outside of the given buildings. Custodial will then notify ISW that a pickup is needed. ISW will empty the bin on that shift. Custodial will return the bin to its designated location.

Laboratory personnel will be responsible for safely depositing sharps waste using approved containers into the central bins. If bins are full and they cannot immediately deposit the waste into the bin, they should return the waste to their lab temporarily and notify the Facilities Dispatch operator at 491-0077 of the situation. Only two types of containers are approved by EHS for this waste. Labs must either use approved disposable (single use) sharps containers or a sturdy, double Box (cardboard) system that is taped shut at the time of disposal and will fit into the designated bins provided in their buildings. Bin size is 23" by 19" (mouth) by 33" high. Five-gallon buckets will not be acceptable to EHS and must be disposed of after placing sharps in one of the approved containers. Place sharps in one of the approved containers until they are full and then tape them shut securely before taking to the designated bin. Building Services will not handle containers left anywhere except inside the designated bins.

Should you have any questions about this policy, please call Building Services at 491-0119, ISW at 491-0113, or EHS at 491-6745. Should a lab manager need additional collection bins or changes in specified bin locations, please contact Building Services, ISW, or the Facilities Dispatch operator. ISW work hours are Monday through Friday from 8:00 a.m. to 8:00 p.m.

Moving Furniture (Heavy Objects)

To avoid common back injuries, always follow the correct lifting procedures as defined in the GENERAL WORK RULES (Chapter 2, page 8, Lifting, Carrying, Handling) of this manual.

- ◆ Consider how heavy an object is and any abnormal shape or weight distribution of the object that would make it particularly difficult to lift, move, and/or carry. Get help to lift these items. The few minutes you may have to wait for help is minimal compared to the time lost due to an injury.

Changing Lights and Setting Time on Clocks

These procedures couple two potential hazards, 1) a constant flow of electricity and 2) use of ladders. Twice the amount of caution normally adhered to should be used when performing these tasks.

- ◆ Know which tools are needed to open a light fixture.
- ◆ Refer to the LADDER SAFETY (Chapter 22) of this manual.

Cleaning Stairs

Exercise extreme caution when working on stairs. Danger increases as you get farther from the bottom of the stairs.

- ◆ Be especially careful when mopping stairs. The slick surface, coupled with the eminent danger of the stairway, make it even more important to use extreme caution.
- ◆ Stand on the stair below or two down from the stair on which work is being performed. This puts less strain on the back and your force will be toward the top of the stairs, rather than the bottom.
- ◆ Mark the top and bottom of the stairway with a "wet floor" sign to alert others of the danger.

Elevators

- ◆ When getting on or off an elevator with a mop bucket or other wheeled equipment, the wheels could get caught in the crack between the floor and elevator. Should this happen, be careful not to trip over the mop bucket or injure your back trying to get the wheels removed. On some older elevators, the floor of the elevator is not level with the floor in the hallway. Take care not to trip when exiting the elevator.

POOL CLEANING PROCEDURES

Pool cleaning consists of three distinct procedures; cleaning and disinfection of the deck areas, removal of the body oils and mineral deposits that form along the waterline, and removal of debris from the pool bottom.

Cleaning and Disinfection of Pool Deck Area:

- ◆ The employee must: wear goggles and rubber gloves with all quaternary disinfectants, set out wet floor signs, minimize contact from the solution with pool water, and, use extreme caution operating battery or cord operated machinery around the pool perimeter.
- ◆ Machines and mops and buckets should be rinsed thoroughly after each use.
- ◆ Use extreme caution with machinery near the pool edge and always make sure that the cords have a functional ground prong on the plug end. Identify and use a GFI outlet for the cord operated machinery.
- ◆ Clean and rinse machinery and brushes before returning to storage.

Cleaning of Pool Waterline

- ◆ For safety reasons, this job is to be performed by two or more individuals. It is most easily accomplished by donning bathing suits/swim trunks and working from within the pool. A belt preserver should be worn at all times.
- ◆ Both goggles and gloves must be worn. The procedure is best accomplished by using a red bucket for the diluted solution of Spark-L. Spark-L will not affect pool pH.

Cleaning of Pool Walls and Bottom

- ◆ Depending on customer/user numbers, the pool must be cleaned from once to three times per week. Both of CSU's pools are equipped with a fully automatic pool cleaner that is introduced into the water and left unattended while the pool is unoccupied. The cleaner works better if the lane line markers are removed. The cleaner is electric and uses water pumps to control all of its functions. It is safe to be in the water while the cleaner is in operation; however, extreme caution should be used. Use only a functioning GFI outlet to plug the transformer into and always check the cord connector ends and the cord body for any frayed or damaged areas. The cleaner weighs about 30 pounds and should be handled with caution when introducing to and removing from the water.
- ◆ The cleaner will not function as designed unless all air is bled out of the cleaner when put into the water. This is done by tilting the unit back and forth while submerged until no more air bubbles leak out of the unit. Once in the water the unit will automatically track across the bottom in a random pattern until all the bottom is scrubbed and cleaned - on every seventh contact with the wall the unit will climb the wall to the waterline and then move vertically along the wall at the waterline for a given period of time before returning to the bottom cleaning mode. The cleaner

comes complete with a remote control to "drive" the cleaner to a particular dirty area so that spot cleaning may be done quickly.

- ◆ When the cleaner has finished, in about four to eight hours the power must be turned off and disconnected and the unit removed from the water. Removal is best accomplished in the shallow end and is most safely done from in the water. In either case (with the employee in or out of the water) the unit may be carefully and gently pulled to the edge by its power cable and lifted to the waterline so that it can be grasped by hand. At this point the cleaner must be carefully tilted and lifted slightly to allow all water to drain from the cleaner. This process is critical as it lightens the unit by about twenty pounds. Remember, when removing the cleaner from the pool deck, the reach and leverage for the weight will be very awkward and the chance for an injury is higher - two people are better! Again, a belt preserver should be worn. Upon removal from the water, the cleaner's filter must always be cleaned. The unit is a very efficient cleaner and will pick up an astounding amount of debris. If not cleaned, the unit will not function efficiently during its next usage. Carefully check all equipment, cords and scrubbing pads before returning the unit to its storage site. In no case should the unit be left, whether operational or not, in a situation in which students or other customers can access it. Replacement cost for the unit is very expensive.

Other Procedures

Occasionally, the pools may be drained for repair work or acid removal of mineral stains. This work is extremely dangerous and requires full safety gear including Tyvek suits and appropriate respirators. This work is planned and supervised either by the carpentry or plumbing shops and occurs on a one or two year cycle.

CONFINED SPACE INFORMATION FOR CUSTODIANS

All Colorado State University Facilities Management employees are **prohibited** from entering any confined space unless they have been properly trained and are equipped, at a minimum, in accordance with OSHA regulations

All visitors to Colorado State University facilities and job sites will comply with this program or be denied access to these areas.

DEFINITION OF A CONFINED SPACE

A space large enough and so configured that an employee can bodily enter and perform assigned work and has the following characteristics:

- A. limited means for entry and exit;
- B. non-existent or inadequate ventilation of the space, allowing for the potential accumulation of toxic air contaminants, flammable or explosive agents, and/or depletion of oxygen; and
- C. not intended for continuous worker occupancy.

Examples of confined spaces: Boilers, degreasers, drop inlets, furnaces, manholes, pipelines, pits, pumping stations, sewers, septic tanks, silos, storage tanks, tanks, tunnels with limited entry, utility vaults, vats, wells, or similar types of enclosures.

DO NOT enter any area that you think might be a confined space without first checking with your supervisor.

CUSTODIAL LOCK OUT/TAG OUT INFORMATION

All Facilities Management employees should be familiar with the following Lock Out/Tag Out general procedure:

DEFINITIONS

- Lock out The placement of a lock on an energy-isolating device. This act prevents workers from operating a piece of equipment until the lock is removed.
- Tag out The placement of a DANGER, DO NOT ENERGIZE, DO NOT OPEN, DO NOT CLOSE, or CAUTION tag on an energy-isolating device. A tag out device is a prominent warning device of a lock out. It is used primarily to warn and to caution other workers that no one is working on the specific equipment, but a hazardous condition exists. Prior to working on a piece of equipment to which a tag is attached, the employee should also lock and tag out the piece of equipment.
- Energy-Isolating Device A mechanical device that prevents the transmission or release of energy. Examples include the following:
- ◆ Manually operated circuit breakers,
 - ◆ Disconnect switches,
 - ◆ Line or block valves.

Lock Out/Tag Out is a safety procedure to prevent accidents. Isolation of energy (electrical, liquid, air and steam) is necessary to safely perform work tasks on equipment. Lock Out/Tag Out is a defensive program for each individual that performs maintenance on equipment. Lock Out/Tag Out procedures should be used when equipment must be un-jammed, cleaned, adjusted, maintained, or repaired

Locks are never to be removed by someone other than the person who placed them on the equipment. The lock is also never to be bypassed, ignored, or otherwise defeated.