

Procedure 4.1519

General Safety Procedures

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A. Introduction

The health and safety guidelines outlined in these practices and procedures are to enhance the protection of lives, health, and property on the campus of Beaufort County Community College (BCCC). The procedures shall apply to all faculty and staff of the college, as well as contractors and visitors on college property, or in any buildings owned, leased, or operated by the college.

The health & safety procedures shall be reviewed annually and revised, as necessary, by the Health, Safety, & Chemical Hygiene Committee.

All staff and faculty are urged to report any situation or condition that could present a health or safety hazard. Reports or suggestions should be made to a Health, Safety, & Chemical Hygiene Committee member, to campus police, or to your immediate supervisor.

B. Occupational Safety & Health Act

The Occupational Health and Safety Act of 1970 provides that every employer engaged in business shall:

1. Furnish to each employee a place of employment free from recognized hazards that are causing or likely to cause death or serious physical harm.
2. Comply with occupational health and safety standards and rules, regulations and orders, pursuant to the Act that are applicable to business and operations.
3. Comply with, and require all employees to comply with occupational health and safety standards and regulations, under the Act, which are applicable to their actions and situations.
4. Encourage employees to contact their immediate supervisor for information that will help them understand their responsibilities under the Act and these practices and procedures.

C. General Workplace Safety Rules

1. Report unsafe conditions to your immediate supervisor.
2. Promptly report all accidents, injuries, or incidents to your immediate supervisor.
3. Hands are the most injured body part. Protect your hands with gloves. Do not put your hands in areas where you cannot see what is in the dark area.
4. Be aware of insects-wasps, bees, spiders, and snakes when putting your hands in dark places.
5. Ensure you know what poisonous plants look like before pulling weeds bare handed.
6. Use proper lifting techniques. Bend at the knees, place your hands under the object and straighten your knees to lift. Get help from co-workers with very heavy objects.
7. Use eye and face protection where there is danger from flying objects or particles, (such as when grinding, chipping, burning and welding, etc.) or from hazardous chemical splashes.
8. Dress properly. Wear appropriate work clothes, gloves, and shoes or boots, where necessary. Loose clothing and jewelry, including finger rings, shall not be worn in areas with machinery that has moving parts.
9. Protect yourself from the harmful effects of sun and heat. Wear a hat and use sunscreen. Drink plenty of water and take a break, as needed, when it is very hot outside.
10. Operate machines or other equipment only when all guards and safety devices are in place and in proper operating condition.
11. Keep all equipment in safe working condition. Never use defective tools or equipment. Report any defective tools or equipment to your immediate supervisor.

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12. Properly care for and be responsible for all personal protective equipment (PPE). Wear or use any such PPE, when required.
13. Lockout or tagout or disconnect power on any equipment or machines before any maintenance, unjamming, and adjustments are made.
14. Do not leave materials in aisles, walkways, stairways, work areas, or other points of egress.
15. Practice good housekeeping at all times.
16. Training on equipment and documentation of effective training is required prior to use.
17. All work areas, floors, aisles, and stairways shall be kept clean and orderly, and free of tripping and slipping hazards. Oils, greases, and other liquids shall be immediately cleaned up, if spilled.
18. Combustible scrap, debris, and garbage shall be removed from the work area at frequent and regular intervals.
19. Stairways, walkways, exit doors, in front of electrical panels, or access to fire fighting equipment shall be kept clear of storage, materials, supplies, trash, and other debris at all times.
20. Hoisting Equipment shall be inspected annually by a certified crane inspecting contractor.
21. Overhead storage areas will be marked as to maximum load rating.
22. Tell your supervisor about any health conditions you may have (diabetes, allergies, heart problems, asthma, etc.). This may save your life if you are unable to speak.

D. Fire Prevention

1. If your clothes catch on fire, "**STOP, DROP, AND ROLL**". Do not run. Running will intensify the fire and cause much more serious burns.
2. All portable fire extinguishers will be conspicuously located, accessible, and maintained in operating condition. Portable fire extinguishers shall receive an annual service check and a monthly visual inspection. These shall be documented on the tag on the extinguisher or other form.
3. All employees must know the location of fire fighting equipment in the work area and have knowledge of its use and application.
4. Exits shall be marked as such by a readily visible sign. Other doors likely to be mistaken for an exit will be marked as to their purpose (i.e., Custodian, Janitor, Mechanical) or "**NOT AN EXIT**".
5. Only approved safety cans shall be used for handling or storing flammable liquids in quantities greater than one gallon. For one or less gallon, only the original container or a safety can will be used. Plastic containers are not allowed over one gallon
6. When heat producing equipment is used, the work area must be kept clear of all fire hazards and all sources of potential fires will be eliminated.
7. Fire extinguishers will be available at all times when utilizing heat-producing equipment.
8. The maximum height for mounting fire extinguishers is 5 feet (60 inches) to the top of the fire extinguisher valve handle.

E. Exposure to Occupational Noise, Chemicals, Lead, & Asbestos

1. Employees exposed to noise levels above the permissible noise level (95 dBA during an 8 hour period) will be included in the hearing conservation program. Hazardous noise areas will be posted and hearing protection worn in those areas, as required. See separate Occupational Noise Procedures.
2. Employees exposed to harmful vapors, gases, fumes, dust, and similar airborne hazards will be furnished protection through proper ventilation or personal respiratory protection equipment. See separate Hazard Communication Program.
3. Any program that involves operating engines or burning and welding indoors must have proper ventilation to minimize exposure to combustion gases.
4. Any demolition, renovation, or self help work will be assessed for lead and/or asbestos exposure, particularly, if pipe, wall, or HVAC insulation, building exteriors, drywall, floor tile and tile mastic, or any painted surfaces or abrasive blasting/grinding is involved. See separate asbestos and lead procedures.

F. Personal Protective Equipment – see separate procedure

G. Lock, Tag, and Try Procedure – see separate procedure

H. Electrical

1. Live electrical parts shall be guarded against accidental contact by cabinets, enclosures, location, or guarding. Open circuit breaker openings or knock out holes, broken receptacles/switches, missing covering plates, etc., will be reported to supervisors for repair or replacement.
2. Working and clear space around electric equipment and distribution boxes will be kept clear and assessable. Nothing closer than 36”
3. Circuit breakers, switch boxes, etc. will be legibly marked to indicate their purpose.
4. All extension cords and electric powered tools (except double insulated) will be grounded. Ground prongs will not be removed. If a ground prong is missing, the cord shall not be used. The plug shall be replaced by a qualified electrician/maintenance employee or the cord thrown away.
5. Electric cords and their strain relief devices will be in good condition, with no splices.
6. Electric wiring/cords entering/exiting any panel/control/junction box will be secured with clamps or other appropriate strain relief device.
7. Extension cords and other flexible cords will not be used in lieu of permanent wiring and receptacles. Cords will not be run through holes in doors, walls, windows, nor will they be fastened to walls, poles, equipment, etc.
8. All lamps below seven feet used for general illumination will have the bulbs protected against breakage.

I. Guarding

1. All flywheels, shafting, pulleys, belts, gears, sprockets, chains, and fan blades will be guarded/enclosed, when located below seven feet above the floor or work platform. This guarding shall be considered adequate when the guard prevents accidental physical contact with any moving parts.
2. Guards installed on machinery and equipment, such as air compressors, conveyors, drill presses, etc., will not be removed when operating. Guards removed for servicing or other work on the machine or equipment will be immediately replaced upon completion of the work.
3. **Welding machine leads** (not whip lines) will be inspected before each use to insure that insulation is intact and protects the worker from electrical shock. Breaks can be repaired using electrical tape that are 10 feet beyond the cable end. Connection points on welding machines shall be covered and/or protected from human contact.
4. **Welding cable whip lines** -- Electrical tape is not acceptable on whip lines or closer than 10 feet from the electrode, to correct broken insulation. Lines shall be replaced or cut shorter and a new connection installed to be connected to the machine or to the electrode.

J. Woodworking equipment

Such as power saws, radial arm saws, table saws and portable abrasive grinders will not be operated unless all required guards are in place. Featherboards and pushboards will be used when necessary.

K. Compressed Gas Cylinders

1. All gas cylinders shall have their contents clearly marked on the outside of each cylinder.
2. Cylinders must be transported, stored, and secured in an upright position. They will never be left laying on the ground or floor, nor used as rollers or supports.
3. Cylinder valves must be protected with caps in place and caps closed when not in use.
4. Oxygen cylinders and fittings will be kept away from oil or grease.
5. Oxygen cylinders will be stored at least 20 feet from any fuel gas cylinder, or separated by a fire barrier at least five feet high with $\frac{1}{4}$ " steel plate or 2 thicknesses of $\frac{3}{4}$ " plywood. This gives a thirty minute fire rating.
6. When cylinders are hoisted, they will be secured in a cradle, sling-board, or pallet. Valve protection caps will not be used for lifting cylinders from one vertical level to another.
7. Burning and/or welding shall not be performed with gas cylinders directly under the work.

L. Ladders

1. Maintain ladders free of oil, grease, and other slipping hazards.
2. Do not load ladders beyond their maximum intended load nor beyond the manufacturer's rated capacity.
3. Use ladders only for their intended purpose
4. Use ladders only on stable and level surfaces, unless secured to prevent accidental movement.
5. Do not use ladders on slippery surfaces, unless secured or provided with slip resistant feet to prevent movement. Do not use slip resistant feet as a substitute for exercising care when placing, lashing, or holding a ladder upon slippery surfaces.
6. Secure ladders placed in areas, such as passageways, doorways, or driveways, or where they can be displaced by workplace activities or traffic, to prevent accidental movement. Use a barricade to keep traffic or activity away from the ladder.
7. Keep areas clear around the top and bottom of ladders.
8. Do not move, shift, or extend ladders while in use.
9. Do not carry objects or loads up or down a ladder that could cause loss of balance and falling.
10. When using a ladder, three points of contact must be used when climbing or standing on a ladder, i.e. two feet and one hand, or two hands and one foot.
11. Ladders will be inspected prior to each use to identify any unsafe conditions. Those ladders which have developed defects will be removed from service and replaced. Ladders with irreparable defects will be destroyed.
12. Metal ladders shall **NOT** be used when doing electrical work. Use ladders equipped with nonconductive side rails, if the worker or the ladder could contact exposed energized electrical equipment.
13. Wooden ladders shall not be painted.
14. Portable ladders will be placed as to prevent slipping, or if used on other than stable, level, and dry surfaces, will be tied off or held. A simple rule for setting up a ladder at the proper angle is to place the base from the vertical wall equal to one-fourth the working length of the ladder. Example-if vertical wall is 12 feet high, then the base of the ladder shall be four feet from the base of the wall.
15. Portable ladders will extend at least three feet above the upper level to which the ladder is used to gain access.
16. The top and second step down of a stepladder will not be used as step.
17. Only one person will be on a ladder at a time.
18. Step ladder use – the top two steps on a step ladder shall NOT be used as steps. Never stand on the very top of a step ladder.
19. Step ladder use rule of thumb – if leaning to the side on a step ladder is necessary, one must not allow the belt buckle to extend past the vertical ladder rails. If leaning

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is required outside the rails, then the ladder must be re-positioned or tie off fall protection afforded.

20. Step ladders shall have a metal spreader or locking device to hold the front and back sections in an open position when ladders are being used.
21. Straight or extension ladders shall NOT be used as a flat work platform, such as putting these ladders on saw horses in order to have a higher work platform.

M. Flammable and Combustible Liquids

1. Only approved safety cans, original containers, or portable tanks will be used to store flammable or combustible liquids.
2. Above ground storage tanks will be separated from each other by a minimum of three feet or 1/6 the sum of their diameters. Dikes or drainage to prevent accidental discharge from reaching adjoining property or waterways will be provided.
3. No more than 25 gallons of Class IA and 120 gallons of Class IB, IC, II, or III liquids, as defined on the label, may be stored outside a storage cabinet or an inside storage room.
4. An emergency shut off switch located 15 - 75 feet from the pumps and a fire extinguisher will be provided at fuel servicing areas.

N. Tools

1. Hand tools with broken/cracked handles, mushroomed heads, or other defects will not be used. Files will have handles installed.
2. Take special precautions when using power tools. Defective tools will be removed from service.
3. Power tools will be turned off and motion stopped before setting tool down.
4. Tools will be disconnected from power source before changing drills, blades or bits, or attempting repair or adjustment. Never leave a running tool unattended.
5. Power saws, table saws, and radial arm saws will have operational blade guards installed and used. Anti-kickback teeth and spreaders will be used when ripping.
6. Portable abrasive side-winder grinders will have guards installed covering the upper and back portions of the abrasive wheel. Wheel speed ratings will never be less than the grinder RPM speed.
7. Pedestal grinders will be permanently mounted, tool rests installed and adjusted to within 1/8 inch of the wheel, tongue guards installed and adjusted to within 1/4 inch of the wheel, and side spindle/nut guards installed.
8. Pedestal grinders shall be secured to the floor or wall to prevent tip over.
9. Air compressor receivers will be drained as manufacturer's requirements or suggestion to prevent buildup of water in the tank.
10. Compressed air will not be used for cleaning purposes, except when pressure is reduced to less than 30 psi by regulating or use of a safety nozzle, and then only with effective chip guarding and proper personal protective equipment worn.

O. Safety Railings and Other Fall Protection

1. All open sided floors and platforms four feet or more above adjacent floor/ground level shall be guarded by a standard railing (top and mid rail, toeboard if required).

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2. Top rail must measure 42" above the floor. Midrails are half that distance. Toe boards are required, if items could fall from the platform to areas below. If cable is used as a top rail, it cannot deflect downward to less than 39" above the floor.
3. All stairways of four or more risers will be guarded by a handrail, or stair rails on the open side. Handrails or stair rails will be provided on both sides, if the stairs are more than 44 inches wide.
4. When a hole or floor opening is created during a work activity, a cover or a barricade must be installed immediately and marked "HOLE".
5. Safety harnesses, lanyards, lines, and lifelines may be used in lieu of other fall protection systems to provide the required fall protection.
6. All tie off/anchor points must be at least head high or higher.
7. All tie off/anchor points must be capable of holding 5000 pounds of force per person tied off.

P. Chemical Use, Storage, and Handling

Any chemical procurement, use, storage, and/or handling shall comply with the BCCC Chemical Hygiene Program.

Q. Scaffolds

1. Scaffold platforms more than ten feet above the ground, floor, or lower level will have standard guardrails (consisting of toprail, midrail, and toeboard) installed on all open sides and ends of platforms.
2. Planking will be laid tight, overlap at least 12 inches, and extend over end supports 6 – 12 inches.
3. Planking shall be scaffold grade boards and so marked. Regular lumber is not acceptable.
4. Mobile scaffolds will be erected no more than a maximum height of four times their minimum base dimension.
5. Scaffolds will not be overloaded beyond their design loadings.
6. A Scaffold Competent Person (as defined by OSHA) will witness scaffold erection and approve all scaffolds before use.
7. See railing requirements in O. above.

R. Forklifts

1. Only authorized and trained employees will operate forklifts and other industrial trucks.
2. Training shall be documented in the employee's personnel file.
3. Safe speeds, load handling, turning, and other safe driving practices will be followed at all times.
4. Operators will ensure loads are stable and/or secure before moving.
5. Employees will not operate any forklift that is in need of repairs, defective, or unsafe. Such forklifts will be removed from service for repair and tagged out with a "Danger-Do Not Operate" tag and the key removed by the supervisor.

S. Excavations and Trenching

1. Any excavation or trench five feet or more in depth (or less than five feet and showing potential of cave-in) will be provided cave-in protection through shoring, sloping, benching, or the use of trench shields. Specific requirements of each system are dependent upon the soil classification as determined by a competent person.
2. A Competent Person (as defined by OSHA) will inspect each excavation or trench daily prior to start of work, after every rainstorm or other hazard increasing occurrence, and as needed throughout the shift.
3. Means of egress will be provided in trenches four feet or more in depth so as to require no more than 25 feet of lateral travel for each employee in the trench.
4. Spoil piles and other equipment will be kept at least two feet from the edge of the trench or excavation.

T. Miscellaneous

1. Only trained employees will service large truck wheels. A cage or other restraining device plus an airline assembly, consisting of a clip-on chuck, gauge, and hose, will be used to inflate tires.
2. Any inspection, disassembly, or assembly of vehicle brakes or clutches must address the possible hazard of asbestos exposure.
3. Operation of any heavy equipment, i.e., front end loader, backhoe, forklift, dump truck, dozer, road grader, etc., must have the operator trained BEFORE any operation can begin. Training must be documented in the employee's training or personnel file.

U. Revision History

Date	REV#	Change
8/3/2015	2	Approved by Senior Staff
6/1/2015	1	Consolidated several existing procedures
February 1993	0	New Issue

References

Legal References: 29 CFR 1910

Cross References: Personal Protective Equipment; Lock, Tag, and Try Procedure

History

Senior Staff Review/Approval Dates: 8/3/2015; Consolidation of policies-6/1/2015; New Issue-2/1993

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Board of Trustees Review/Approval Dates: *Enter date(s) here*

Implementation Dates: *8/3/2015*

