



ROCKY
MOUNTAIN
COLLEGE

General Shop and Work Area Safety Plan

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2013 GENERAL SHOP & WORK AREA SAFETY PLAN

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1. GENERAL SHOP & WORK AREA SAFETY PLAN

Accepted safety and health precautions will be practiced by Rocky Mountain College in the use of general shop machines, fixed and portable power tools, and other handheld equipment so that all employees using such equipment will be protected against personal injury. It is also RMC's policy to institute practices that will minimize the danger of injury to non-operators or user personnel who will be in the area and to minimize the risk to visitors.

2. SUPERVISOR & EMPLOYEE RESPONSIBILITIES

Rocky Mountain College's supervisors will recognize those factors in the workplace with accident potential and will provide frequent inspections of job sites, work methods, and materials/equipment used. Any unsafe equipment/material will be tagged and rendered inoperative or physically removed from its place of operation. Also, the supervisor will permit only qualified personnel to operate equipment and machinery according to safe work practices.

A. Supervisor Responsibilities:

1. Ensure safe working conditions.
2. Provide necessary protective equipment.
3. Ensure that required guards and protective equipment are provided, used, and properly maintained.
4. Ensure that tools and equipment are properly maintained and used.
5. Plan the workload, and assign employees to jobs that they are qualified to perform. Rocky Mountain College ensures that the employees understand the work to be done, the hazards that will be encountered, and the proper procedures for doing the work safely.
6. Take immediate action to correct any violation of safety rules observed or reported to them.
7. Ensure workers exposed, or potentially exposed, to hazardous chemicals/materials have access to appropriate material safety data sheets (MSDS).
8. Be familiar with all procedures for safe use and guarding of machines, personal protective equipment required, shielding against possible injury to other employees or visitors, and where fixed or portable powered or non-powered machines and tools are located.
9. Train new employees by providing and requiring manuals to be studied, and personally instruct and request the assistance of veteran employees already familiar with required safety precautions.
10. Post signs indicating the use of powered machines by "Authorized Personnel Only" and require the employees under his/her supervision to assist in the enforcement of this policy.
11. Ensure that no one is allowed to use fixed or portable powered shop machines or welding equipment without sufficient training to the supervisor's satisfaction.

12. Coordinate, plan, and conduct safety meetings with employees as often as needed and warranted.
13. Make periodic inspections of shop areas and other industrial areas. Note all deficiencies and initiate corrective actions.

B. Employee Responsibilities:

1. Rocky Mountain College employees will be thoroughly trained in the use of protective equipment, guards, and safeguards for chemicals and safe operation of equipment, machines, and tools they use or operate. If the employee does not feel sufficient training has been given, he/she should inform the supervisor immediately and before any work needing specialized training.
2. Only employees who have been trained and those undergoing supervised on-the-job training (OJT) will be allowed to use shop equipment, machines, and tools.
3. Comply with Rocky Mountain College policies and good safe practices when using fixed and portable power tools, equipment and handheld equipment.
4. Clean up all work areas and tools when finished using equipment.
5. Maintain the tools, equipment, and work area in an orderly and safe manner.
6. Properly train new users of equipment that he/she is responsible for.
7. Will not use or permit use of defective equipment or tools in disrepair. Malfunctioning equipment and damaged hand tools will be reported and repairs made before using the equipment or tools. If repairs are not possible, the equipment or tools will be discarded.

3. SHOP PROCEDURES WORK AREA SAFETY

1. All portable and fixed powered shop machines and tools will be equipped with approved guarding devices. Guards are to be in place while using the machine. Equipment will also be properly electrically grounded before use.
2. Proper personal protective equipment will be provided by Rocky Mountain College (safety glasses, goggles, and shields) and used during grinding or other work that will produce flying particles (e.g., drill press, power saws, etc.).
3. Rocky Mountain College approved dust respirators will be used for work that produces airborne dust particles. Eye protection is required during electrical or electronic hardware repair, installation, and/or open front operation.
4. Approved face, eye, and body protection will be used during any burning or welding operation. Also, sufficient shielding that provides protection to others in the immediate area will be used.
5. Flammable materials (paints, solvents, chemicals, etc.) will not be stored by Rocky Mountain College within the immediate area of any burning or welding operation. Flammable materials will be stored in appropriately rated and RMC-approved cabinets.
6. Any employee using portable fixed tools (drill press, jig or band saw, etc.) will not wear loose clothing.
7. Anyone with long hair will tie back their hair or wear acceptable hair and head protection while operating equipment.
8. All stock (lumber, metal, etc.) will be clamped down (attempting to hold stock with hands will not be permitted).
9. Before any Rocky Mountain College employee performs service or maintenance on a machine or piece of equipment where the unexpected energizing, start up, or release of stored energy could occur and cause injury, the machine or equipment will be made safe. This is accomplished by locking out and tagging out energy isolating devices, or otherwise disabling the machines or equipment.

10. Clean up after using powered equipment or hand tools will be done immediately following use of the power tool.
11. Before any work is started in any laboratory area, a request will be made to the faculty supervisor to ensure that there will be no danger from hazardous materials in the immediate area of work.
12. Good housekeeping will be maintained in the shop area. Material will be stored in such a manner that there is no danger from sliding, falling, or presenting a hazard by striking against or cutting.
13. Scrap stock will be cleaned from floor and the workbenches following each job or at the end of each day.

4. PERSONAL PROTECTIVE EQUIPMENT (PPE)

1. Personal protective equipment (PPE) is not a substitute for engineering controls or feasible work or administrative procedures.
2. While these controls are being implemented, or if it has been determined that control methods are not feasible, PPE is required whenever there are hazards that can do bodily harm through absorption, inhalation, or physical contact.
3. This equipment includes respiratory and hearing protective devices, special clothing, and protective devices for the eyes, face, head, and extremities.
4. All PPE will be of safe design and constructed for the work to be performed and will be maintained in a sanitary and reliable condition.
5. Eye protection is required when there is a possibility of injury from chemicals or flying particles. Examples of operation requiring the use of eye protection include, but are not limited to:
 - a. Chipping, grinding, and impact drilling.
 - b. Breaking concrete, brick, and plaster.
 - c. Welding or helping in welding of any type.
 - d. Cleaning with compressed air.
 - e. Tinning or soldering lugs or large joints.
 - f. Riveting, grinding, or burning metals.
 - g. Handling chemicals, acids, or caustics.
6. Face shields will be thoroughly washed with soap and water before being worn by another person.
7. Appropriate hearing protection will be used where employees are in designated hazardous noise areas with operating noise sources or using tools or equipment that are labeled as hazardous noise producers.
8. Appropriate hand protection will be used where employees are in designated hazardous areas.
9. Foot protecting, non-skid shoes will be worn where floors will be wet or greasy. Where there is reasonable probability of foot or toe injury from impact and compression forces, safety footwear will be worn.
10. Respiratory protection is needed with various airborne hazards (e.g., organic vapors, particulates, fumes, etc.) that personnel will encounter, and respiratory protection will be required.
11. Supervisors will ensure that shop personnel use protective clothing and equipment that will protect them from hazards of the work they perform.
12. It is the responsibility of workers to keep their PPE in a clean, sanitary state of repair and use the equipment when required.
13. Workers will keep their hands and face clean, change clothes when they are contaminated with solvents, lubricants, or fuels, and keep their hands and soiled objects out of their mouth.

14. No food or drink will be brought into or consumed in areas exposed to toxic materials, chemicals, or shop contaminants.
15. Workers will wash their hands before eating or smoking after exposure to any contaminant.

5. FIRE PREVENTION

1. All Rocky Mountain College shop services personnel will receive fire prevention training as part of their general training.
2. Supervisors in charge of operations where fuels, solvents, or other flammable liquids are used will be constantly alert for hazards and unsafe acts.
3. Fuels such as gasoline will never be used to clean floors or clothing, and open solvent or gasoline containers will not be kept near electrical equipment.
4. The use of low flashpoint petroleum solvents will be avoided whenever possible.
5. Fire extinguishers of at least BC20 or greater rating will be installed in shop areas. The number of extinguishers depends upon the size and layout of each facility. Fire extinguishers will meet the following OSHA requirements:
 - a. Be kept fully charged and in their designated area.
 - b. Be located along normal paths of travel.
 - c. Not be obstructed or obscured from view.
 - d. Be visually inspected to ensure that they:
 1. Are in their designated places.
 2. Have not been tampered with or actuated.
 3. Do not have corrosion or other impairments.
 4. Are accessible and not obstructed.
 5. Be examined at least yearly and/or recharged or repaired to ensure operability and safety.
 6. Be hydrostatically tested.
 7. Be placed so the maximum travel distance, unless there are extremely hazardous conditions, does not exceed 75 feet for Class A or 50 feet for Class B locations.

6. MATERIAL STORAGE

1. Rocky Mountain College will avoid all unnecessary accumulation of materials and supplies in the shop area.
2. The only place materials will accumulate in quantity is in designated storerooms and material holding areas.
3. The storage of materials will not, of itself, create a hazard.
4. Stored materials will not obstruct fire extinguishers, alarm boxes, sprinkler system controls, electrical switch boxes, machine operations, emergency lighting, first aid or emergency equipment, or exits.
5. Heavy materials and equipment will be stored low and close to the ground or floor to reduce the possibility of injury during handling.
6. All passageways and storerooms will be maintained clean, unobstructed, dry, and in sanitary condition.
7. Safety clearance will be provided for aisles at loading docks, through doorways, and wherever turns or passages will be made with mechanical handling equipment, such as lift trucks or pallet jacks. Any obstructions that could create a hazard should be removed immediately.

7. TOOL USE

Incidents at the job site involving hand tools are usually the result of misuse. Hand tools are precision tools capable of performing many jobs when used properly. Rocky Mountain College's prevention of incidents involving hand tools on the job site becomes a matter of good instruction, adequate training, and proper use. Hand tool safety requires that the tools be of good quality and adequate for the job. All tools will be kept in good repair and maintained by qualified personnel. Portable power tools increase mobility and convenience but are frequently more hazardous to use than their stationary counterparts.

- 1.** Racks, shelves, or toolboxes will be provided for storing tools that are not in use.
- 2.** When personnel use hand tools while working on ladders, scaffolds, platforms, or work stands, carrying bags will be utilized for tools that are not in use. Workers should take every precaution to not drop tools.
- 3.** Appropriate supervisors will frequently inspect all hand tools used in the operation. Defective tools will be immediately removed from service.
- 4.** When handles of hammers, axes, picks, or sledges become cracked, split, broken, or splintered, they will be immediately replaced.
- 5.** Tool handles will be well fitted and securely fastened by wedges or other acceptable means.
- 6.** Personnel who are required to use portable power tools in their work will be thoroughly trained in safe operating practices. Safe operating procedures will be set up for each type of tool consistent with the manufacturer's instructions.