

## **Fire and Life Safety Program**

**Contact:** Director of Risk Management

1. Rogue Community College is committed to the safety of all employees regarding fire and life safety issues the workplace. Rogue Community College is also committed to complying with all applicable federal, state and local health and safety codes and regulations. To ensure that all affected employees are provided with the necessary information and training, the following Fire and Life Safety Program has been established. All employees of Rogue Community College will participate and comply with all sections of the Fire and Life Safety Program. The written Fire and Life Safety Program will be reviewed, updated and maintained by the Rogue Community College Risk Management Department. A printed copy of the program is available at the Risk Management office and online at <https://web.roguecc.edu/risk-management/campus-occupational-safety>.
2. Purpose
  - a. The purpose of this program is to prescribe minimum requirements necessary to establish a reasonable level of fire and life safety and property protection from the dangerous conditions that could result in fire or explosion on all RCC properties and to:
    - i. Providing safe egress routes from all areas within buildings;
    - ii. Detecting or suppressing fires in the earliest stages;
    - iii. Identifying and eliminating hazardous procedures, operations, and conditions;
    - iv. Guarding against or controlling fire hazards that cannot be eliminated;
    - v. Establishing safe practices consistent with operations; and
    - vi. Motivating, training and educating all personnel in fire safety.
  - vii. The fire protection program shall include providing adequate fire protection and fire suppression systems, training all personnel in fire prevention, incorporating fire safety design features in new construction and renovation projects, inspecting and maintaining fire protection equipment and systems, detecting and correcting fire hazards, and investigating all fires to determine causes and appropriate corrective actions.
3. Scope
  - a. This program applicable to all RCC staff, faculty, students, contractors, visitors and property.
  - b. This program applies to the control and elimination of potential fire hazards on all RCC properties and applies to both new and existing conditions. The College is committed to following fire safety practices, as articulated by both National Fire Protection Association Codes and other organizations setting fire safety standards. Fire and Life Safety systems are designed to provide staff, students and visitors safe, secure structures that meet and/or often exceed, fire and building codes.

#### 4. Responsibilities

##### a. Employer

- i. Rogue Community College will evaluate, develop and implement each area of the Fire and Life Safety Program as required and or recommended by the following:
  - B. NFPA 1 - National Fire Code
  - C. NFPA 30 – Flammable and Combustible Liquids Code
  - D. NFPA 70 – National Electric Code
  - E. NFPA 80 – Standard for Fire Doors and Other Opening Protectives
  - F. NFPA 101 – Life Safety Code

##### b. Employee

- i. All employees of Rogue Community College will comply with each area of the Fire and Life Safety Program while employed at Rogue Community College.

#### 5. Specific Departmental Responsibilities

##### a. Facilities

- i. Ensure that fire protection and life safety systems are maintained in good working order at all times.
- ii. Expedite repairs of fire protection and life safety systems to minimize their down time.
- iii. Inspect and repairs fire doors.
- iv. Provide assistance to clean up and restore fire and water damaged areas.
- v. Know the locations of utility services, such as gas shutoff valves and electrical switch gear rooms.
- vi. Arrange for the required inspection of the sprinkler systems, standpipes, emergency lighting, and Halon and carbon dioxide systems by an outside contractor.
- vii. Arrange for the Ansul systems to be serviced annually.
- viii. Arrange for the Ansul system hood cleaning semi-annually.
- ix. Ensure that all exit signs and emergency lights are lamped and in proper working order.
- x. Coordinate with Risk Management to request appropriate repair and restoration funding to correct identified fire/life safety discrepancies.

##### b. Risk Management

- i. Maintain the fire protection system by conducting monthly inspections of portable fire extinguishers. Records are maintained by the Risk Management Department.
- ii. Coordinate with Facilities to request appropriate repair and restoration funding to correct identified fire/life safety discrepancies.

#### 6. Fire Department Jurisdictions

- a. Rural Metro is responsible for fire response at the Redwood Campus located just outside of the city of Grants Pass.

- b. Grants Pass Fire / Recue is responsible for fire response for the Ester Bristol Education Center located in downtown Grants Pass.
- c. Medford Fire Department is responsible for fire response for the Riverside Campus located in downtown Medford.
- d. Jackson County Fire District 3 is responsible for fire response for the Table Rock Campus located in White City.
- e. Illinois Valley Fire District is responsible for fire service at the Illinois Valley Learning Center in Kerby.

## 7. Definitions

- a. Authority Having Jurisdiction (AHJ): An organization, office, or individual responsible for enforcing the requirements of a code or standard, or for approving equipment, materials, an installation, or a procedure.
- b. Approved: Acceptable to the AHJ
- c. Code: A standard that is an extensive compilation of provisions covering broad subject matter or that is suitable for adoption into law independently of other codes and standards.
- d. NFPA: National Fire Protection Association
- e. Shall: Indicates a mandatory requirement.
- f. Should: Indicates a recommendation or that which is advised but not required.
- g. Alarm: A warning of danger.
- h. Clear Space: An area free of all combustible materials.
- i. Combustible (Material): A material that, in the form in which it is used and under the conditions anticipated, will ignite and burn; a material that does not meet the definition of noncombustible or limited-combustible.
- j. Combustible (Liquid): Any liquid that has a flash point at or above 100 degrees F.
- k. Common Path of Travel: The portion of exit access that must be traversed before two separate and distinct paths of travel to two exits are available.
- l. Detector: A device suitable for connection to a circuit that has a sensor that responds to a physical stimulus such as gas, heat or smoke.

- m. Emergency: A fire, explosion, or hazardous condition that poses an immediate threat to the safety of life or damage to property.
- n. Fire Door: Any combination of a fire door, a frame, hardware, and other accessories that together provide a specific degree of fire protection to the opening.
- o. Flammable Liquid: Any liquid that has a flash point below 100 degrees F.
- p. Means of Egress: A continuous, unobstructed and protected path of travel from any point in a building to an exterior exit and consisting of three distinct parts:
  - i. The exit access: The path of travel that leads to an exit door and/or exit discharge.
  - ii. The exit: , The space separated from other interior spaces (hall, stairs) by fire-resistance-rated construction that is between the exit access and exit discharge door. and
  - iii. The exit discharge: The door(s) that open(s) to the exterior of a building.
- q. Safe Area of Refuge: An area that is either:
  - i. A story in a building where the building is protected throughout by an approved automatic sprinkler system and has not less than two accessible rooms or spaces separated from each other by smoke-resistant partitions.
  - ii. A space located in a path of travel leading to a public way that is protected from the effects of fire, either by separation from other spaces in the same building or by virtues of location, which permits a safe delay in egress travel from any level.
- r. Safety Can: An ANSI/UL listed metal or nonmetallic liquid fuel container with a capacity limited to 5 gallons equipped with:
  - i. A spring-loaded, self-closing spout cover, held open with a handle.
  - ii. The ability to relieve internal pressure if the can is exposed to a fire.
  - iii. A screen or strainer in each spout.
  - iv. Temporary wiring: Approved wiring for power and lighting during a period of construction, remodeling, maintenance, repair, or demolition, and decorative lighting, carnival power and lighting, and similar purposes.

## 8. Fire Classifications

- a. Class A Fires
  - i. Involve ordinary combustible materials such as wood, paper, rags, rubbish and other solids.
- b. Class B Fires
  - i. Occur in the vapor/air mixture over the surface of flammable and combustible liquids such as gasoline, fuel oil, paint thinner, hydraulic fluids, flammable cleaning solvents and other hydrocarbon fuels.

- c. Class C Fires
    - i. Involve energized electrical equipment.
  - d. Class D Fires
    - i. Involve combustible metals such as magnesium. Class D Fires
9. Building Occupancy levels – Occupancy levels for each space are determined by the Fire Marshal, however those occupancy levels will change based on how the space is utilized (i.e. what furniture is in the room, standing/sitting occupants, etc.). The maximum occupancy level should be visible over or near the entrance to the space.
10. Heat Detection Devices
- a. Heat Detectors
    - i. Heat detectors respond to the convected energy in hot smoke and fire gases (i.e., heat). Heat detectors are normally located in laboratories, mechanical rooms, storage areas, break rooms, and areas that could produce high levels of dust, steam, or other airborne particles.
  - b. Smoke Detectors.
    - i. Smoke detectors respond to the solid and liquid aerosols produced by a fire (i.e., smoke). Since smoke detectors cannot distinguish between smoke particles and other particles such as steam, building occupants must be aware of detector locations and be considerate when working around them. Smoke detectors are normally found in exit corridors, office areas, assembly areas, and sleeping areas.
  - c. Flame Detectors
    - i. Flame detectors respond to the presence of a flame. Flame detectors may be found in specific areas where a fire will develop rapidly and the hazard is greater than what is expected in normal locations within buildings such as chemical storage rooms. These devices are most commonly used in conjunction with a fire extinguishing system.
  - d. Manual Pull Stations
    - i. Manual pull stations, when activated, will initiate the buildings fire alarm notification system. Pull stations are generally located near exit stairways, near building exits, or in long corridors. Occupants should be familiar with the location of these devices should one need to initiate a building evacuation.

## 11. Types of Fire Protection Equipment

- a. The basic types of fire protection equipment/systems used at RCC include:

- i. Portable fire extinguishers
- ii. Fire sprinkler systems
- iii. Chemical extinguishing systems, including carbon dioxide, dry chemical and halon systems
- iv. Fire alarms and smoke detectors

## 12. Fire Extinguishers

- a. Fires are classified into four different classifications depending on the type of materials or fuels involved and the type of fire determines the type of extinguisher used to extinguish it. Accordingly, all fire extinguishers are identified with common symbols to indicate which class of fire the extinguisher will be most effective on. Fire Extinguishers located throughout the campus are typically rated for use on Class A, Class B and/or Class C fires and can be used effectively on any such fire.
  - i. Class A extinguishers are to be used only on Class A fires. This extinguisher contains only water and compressed air and is not to be used on B, C, D, or K fires.
  - ii. Carbon Dioxide extinguishers are recommended for Class B and C fires. Halon or other similar type fire extinguishers are also rated to be used on B and C fires.
  - iii. Dry Chemical extinguishers come in two types. One type is rated for B-C fires, and the other is rated for A-B-C fires. The ABC or multipurpose extinguisher is the most common extinguisher found on the TAMU Campus.
  - iv. Class D extinguishers are specialized to be used only on flammable metals. Never attempt to extinguish a Class D fire with anything other than a CLASS D extinguisher.
  - v. Class K extinguishers are designed to be used on flammable cooking oils. They are to be used in conjunction with a commercial fire suppression system.
  - vi. There is no extinguisher that is designed to be used on all types of fires. It is important to know your fire extinguisher and its limitations

## 13. Sprinkler Systems

- a. The purpose of a water sprinkler system is to contain and to minimize the spread of a fire, but is often successful in extinguishing fires. Sprinkler heads are normally activated by heat. Generally, if one is activated not all of the sprinklers in a building will discharge. Only in specialized sprinkler systems are they connected to smoke detectors or manual pull stations.
  - i. To ensure that sprinklers are effective in the event of a fire:
    - B. Maintaining a minimum of 18 inches of clearance below the sprinkler head is required to any equipment or stored items.
    - C. Do not hang drapes, curtains, tarps, etc that will interfere with the spray pattern of the sprinkler.
    - D. Never attach or hang anything from sprinkler piping or sprinkler heads
    - E. Do not paint or damage sprinkler heads in any manner.

- b. Special work areas such as computer server rooms or bulk chemical storage rooms may contain specialized gaseous fire extinguishing systems such as carbon dioxide (CO<sub>2</sub>), FE 13, FM 200, or Halon 1301 in lieu of water based fire suppression systems. These systems work by displacing the oxygen in the room to a level that will no longer support a fire. To ensure that the system operates as designed, the area or room(s) protected must have its structural integrity preserved in order to maintain the required concentration level of the gas. There should be no penetrations through walls, ceilings, or floors and doors should be kept in the closed position.
- c. Once a system is activated, the low level of oxygen is also dangerous to humans. Caution should be used when working in areas where these oxygen-depriving extinguishing agents are used. Manually operated systems, such as a pull-station or push button, should have signs posted indicating it will activate the agent. Do not enter a room that has discharged an oxygen-depriving agent until it has been ventilated and appropriate tests of the atmosphere have verified it is safe to enter.

#### 14. Fire Hoses and Standpipe Systems

- a. A standpipe system is an arrangement of piping, valves, hose connections and allied equipment installed in a building or structure for the purpose of manually extinguishing a fire. Fire hose cabinets are located in several buildings near or in the exit stairwells and in corridors. RCC holds the stance that employees should only attempt to extinguish a fire with a portable fire extinguisher. Local fire department responders will use the standpipe system in the event of a fire in a building. Access to these systems should be maintained at all times and should not be blocked by any equipment, chairs, desks, etc.

#### 15. Fire doors

- a. Fire doors serve as a barrier to limit the spread of fire and restrict the movement of smoke. Unless these doors are held open and released by the building fire alarm system fire doors should remain closed at all times. Do not tamper with fire doors or block them with equipment, potted plants, furniture, etc.
- b. Combustible materials (paper/decorations) should not be attached to fire doors nor the vision panels (glass) of fire doors.
- c. Fire doors are normally located in stairwells, corridors, and other areas required by Fire Code. The door, door frame, locking mechanism, and closure are rated between 20 minutes and three hours. A fire door rating indicates how long the door assembly can withstand heat and a water hose stream. All fire doors will have a label affixed to the door indicating the manufacturer, rating, serial # of the door and other information. It is important to not remove, paint, or in any way damage or destroys the label.

- d. For your safety and to maintain the integrity of fire doors there are several important items to remember:
  - i. Know which doors are fire doors and keep them closed to protect building occupants and exit paths from fire and smoke.
  - ii. Never block a fire door with a non-approved closure device such as a door stop, blocks of wood, or potted plant.
  - iii. For fire doors with approved closure devices, make sure that nothing around the door can impede the closure.
  - iv. Never alter a fire door or assembly in any way. Simple alterations such as changing a lock or installing a window can lessen or completely void the fire rating of the door.
  - v. Doors to offices, laboratories, and classrooms help act as smoke barriers regardless of their fire rating. Keep these doors closed whenever the room is unoccupied.
  - vi. A closed door is the best way to protect your path to safety from the spread of smoke and fire.

#### 16. Fire Hydrants

- a. Fire hydrants are located throughout the campus and play a vital role in fire suppression operations. It is important to maintain a clear path to all hydrants and allow clear distances around hydrants to allow uninhibited operation should an emergency occur. It is also important that vehicles are not parked within 15 feet of fire hydrants or other fire safety equipment.

#### 17. Fire Lanes

- a. A fire lane is an area designated for emergency personnel only. It allows them to gain access to building and/or fire protection systems. Parking in or blocking any fire lane is prohibited.
  - i. Security will be responsible for enforcing violations of this section.
    - B. Security will issue a warning to a vehicle parked in one of these areas. If the vehicle is found there again, the person responsible for that vehicle will be processed as a student/employee disciplinary issue.

#### 18. Open Burning

- a. RCC must comply with all state and local guidelines for any open burns. In order to be able to conduct such a burn, several criteria must be met prior to Risk Management issuing an authorization to burn. These general guidelines include:
  - i. Only natural occurring materials may be burned
  - ii. Only materials from on the site may be burned (no materials may be brought in from other locations)

- iii. A responsible person must be present during the entire burn and be equipped with adequate fire-fighting agents, and be able to quickly communicate with emergency response personnel.
- iv. A plan in place to follow all rules set by the local fire protection agency responsible for fire suppression at the location.

#### 19. Liquefied Petroleum Gas (LPG)

- a. The Oregon State Fire Marshall regulates the sale and use of LPG, including butane and propane. In addition, the Liquefied Petroleum Gas Code (NFPA 58) provides regulations on the use of LPG as well. These regulations govern several types of LPG-powered equipment and procedures including the following:
  - i. Forklifts
  - ii. Floor buffers
  - iii. Cooking and heating equipment
  - iv. Laboratory equipment
- b. Exhaust fumes may contain carbon monoxide which can present a health hazard. Exhaust can also create smoke which may activate a smoke detector. Take special precautions to ensure adequate ventilation when using these machines indoors.
- c. Because LPG is extremely flammable, it is a potential fire hazard. Do not store LPG near heat, flame, or other ignition sources. Buildings frequented by the public are limited to cylinders with a propane capacity of 1 pound. The total quantity stored is limited to 200 pounds of propane. Buildings not frequented by the public are limited to a maximum quantity of 300 pounds of propane. The cylinder size is not restricted. Containers not being used should be placed outside in a storage area that is at least 25 feet away from other buildings, combustible materials, roadways, railroads, pipelines, utility lines, and the property line. This storage area should prevent unauthorized entry and have a portable fire extinguisher within 25 feet.
- d. When using portable LPG container's the requirements listed below shall be followed:
  - i. Inspect containers for excessive denting, bulging, gouging, and corrosion and check hoses for cracks and deterioration; containers displaying any of these signs shall be removed from service
  - ii. Label all containers as Flammable and as LP-Gas, Propane, or Butane
  - iii. Cylinders shall be located to minimize exposure to excessive heat, and physical damage
  - iv. Cylinders shall be stored away from exits, stairways, or areas normally used or intended for the use of egress for occupants
  - v. The maximum allowable quantity of LPG stored in a building shall not exceed 2 pounds

- vi. Quantities in excess of this amount shall be stored outside in a lockable ventilated enclosure of metal exterior construction; protection against vehicle impact shall be provided
- e. LPG powered Industrial Trucks
  - i. Use of LPG powered industrial trucks shall follow the guideline for containers in the previous section, in addition to the following:
  - ii. LPG cylinders shall be refueled outdoors
  - iii. The number of cylinders on an industrial truck shall not exceed 2
  - iv. The size of a cylinder on an individual truck shall not exceed 45 pounds
  - v. Cylinder pressure relief valve discharge shall be directed upward within 45 degrees of vertical and shall not impinge on the cylinder, exhaust system, or any other part of the truck
  - vi. The discharge opening shall be provided with a protective cover
  - vii. Trucks shall not be parked or left unattended without the cylinder shutoff valve being closed
  - viii. Do not park truck near areas of excessive heat or near sources of ignition

## 20. Additional Areas

- a. Candles and Incense:
  - i. Candle/oil warmers, wax sculptures, potpourri pots, paraffin baths, incense, and any open flame device are prohibited in offices, work spaces classrooms or any other campus building spaces without approval from the Risk Management Department.
  - ii. Candles shall not be used during power outages or in holiday season decorations such as jack-o-lanterns, Christmas wreaths or menorahs.
- b. Open Flames:
  - i. No open flames are allowed on campus grounds: sky lanterns, tiki torches, fire pits, etc. are not to be utilized for celebrations or events.
  - ii. Questions regarding the use any open flame device should be directed to the Risk Management Department.
- c. Electrical Power Strips:
  - i. All power strips shall be listed and have a grounded (3-prong) attachment plug and be equipped with a resettable fuse/circuit breaker.
  - ii. Plugging additional power strips into one power strip (piggybacking) is not allowed.
  - iii. If any piggybacked power strips are found, they are to be immediately taken out of service and the Risk Management Department notified.
- d. Extension Cords:
  - i. Extension cords shall not be utilized as a substitute for permanent wiring.
  - ii. Cord use should be limited to no longer than 30 days.

- iii. When extension cords are used as temporary power, the extension cord needs to be rated to accept the load intended to be placed on it. Questions should be directed to the Risk Management Department or the Facilities Department.
- e. Festival Lighting:
  - i. Indoor or outdoor decorative light strips and cords (Christmas lights, rope lights, etc.) shall be UL listed and not utilized for more than 30 days.
- f. Flammable and Combustible Liquids (i.e., gasoline, paint, glue, chemicals, etc.):
  - i. Flammable and Combustible liquids shall not be stored in college buildings, unless stored in an approved Flammable Storage Cabinet or room.
  - ii. Flammable Storage Cabinets shall be placed in laboratories, work rooms and maintenance shops and shall not be placed in corridors or exit access routes.
  - iii. It is recommended that no more than 2 gallons of flammable liquids be kept outside of a flammable storage cabinet during the class or workday.
  - iv. Flammable and combustible liquids used as fuel for maintenance and lawn equipment (gasoline and diesel) shall be stored in and dispensed from approved ANSI/UL rated Safety Cans; unless fueled directly from bulk storage fuel stations.
  - v. Storage of compressed flammable gasses is regulated by the RCC Hazard Communication Plan.
- g. Space Heaters and Radiators:
  - i. Personal space heaters and radiators shall be UL listed and equipped with an automatic shut-off device that will disconnect power to the heating strips in the event the heater or radiator is tipped over.
  - ii. Personal space heaters should be plugged directly into wall outlets.
  - iii. If you wish to purchase a space heater, you will first need to obtain approval for the requested heater from the Risk Management Department and the Facilities Department.
- h. Light Coverings:
  - i. The use of acetate, cellophane, tissue paper, or other combustible materials over or in light fixtures is prohibited.

21. Smoking:

- a. RCC is not a tobacco free campus. Smoking and the use of any tobacco products is limited to designated smoking areas only.

22. Authorities:

- a. Questions regarding compliance with fire and life safety codes and standards should be directed to the Director of Risk Management.
- b. The Director of Risk Management serves as the point of contact for RCC and as the liaison between the College and the following:

- i. Oregon State Fire Marshalls Office
- ii. Medford Fire Department
- iii. Grants Pass Public Safety
- iv. Jackson County Fire District 3
- v. Illinois Valley Fire District
- vi. Rural Metro

### 23. Fire/Emergency Drills.

- a. Fire and emergency drills are conducted for all College buildings periodically, and scheduled through the Risk Management Department.
- b. There may be some building occupants who continually refuse to participate in evacuation drills. Problems with frequent false or nuisance alarms in a building may make matters even worse. In most instances, the college cannot issue citations for failure to participate in a drill. However, those refusing to participate may be subject to administrative and/or academic action.
- c. It is a violation of the Oregon Fire Code to fail to leave a building when a fire alarm is sounding. When the building alarm sounds, assume it is a real emergency and leave the building.
- d. It is unlawful for any person to prevent another person from leaving a building when an alarm is sounding. Faculty members are not permitted to keep classes in session during such emergency conditions.

### 24. Building Occupancy Codes

- a. Assembly (A occupancy) – The use of a building for the gathering of people for civic, social or religious functions (athletic venues, large lecture halls, cafeterias). *Quarterly by employees and students.*
- b. Business (B occupancy) – The use of a building or parts thereof for office, professional transactions, storage of records or accounts, research labs that are not considered hazardous, occupancies and assembly areas with an occupant load of less than 50 people. *Annually by employees and students.*
- c. Educational (E occupancy) – The use of a building or parts thereof for educational purposes through the 12<sup>th</sup> grade or a daycare with more than 5 children older than 2.5 years of age. *Monthly or as required by the licensing agency by employees and students.*
- d. Factory (F occupancy) – The use of a building or parts thereof for assembling, fabricating, finishing, manufacturing, repair operations, etc. *Annually by employees and students.*

## 25. Document Retention

- a. Records of required emergency evacuation drills shall be maintained and include the following information:
  - i. Identity of the person conducting the drill
  - ii. Date and time of the drill.
  - iii. Notification method used.
  - iv. Number of staff members on duty and participating.
  - v. Number of occupants evacuated.
  - vi. Special conditions simulated.
  - vii. Problems encountered.
  - viii. Weather conditions when occupants were evacuated.
  - ix. Time required to accomplishing the evacuation.

## 26. Training

- a. The Director of Risk Management is responsible for ensuring the following employee training is accomplished:
  - i. Employees are provided with training, which shall apprise employees of the fire hazards of the materials and processes to which they are exposed.
  - ii. Each employee reviews upon initial assignment those parts of the fire prevention plan which the employee must know to protect the employee in the event of an emergency. The written plan shall be kept in the workplace and made available for employee review.