


Facilities Management
Fire Prevention Program Standard Operating Procedures

SOP #:	EHS-014	Revision: 1
Dept:	Environmental Health and Safety	Date: 03/11/19
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1. PURPOSE

The campus of Colorado State University-Pueblo is located in the northeast portion of the City of Pueblo and incorporates many varied activities. CSU-Pueblo is actively concerned with the safety of all faculty, staff, students and guests on the CSU-Pueblo campus. Safety can only be effectively achieved with the cooperation of the entire campus community. In an effort to keep all campus stakeholders safe, a fire prevention program should be followed across campus to limit loss of life and property to campus fires. This prevention plan is provided as a guide to comply with the requirements of Occupational Safety and Health Administration’s (OSHA) Fire Prevention Standard, 29 Code of Federal Regulations 1910.39, as well as to provide other helpful information.

2. RESPONSIBILITIES

2.A. Environmental Health and Safety (EHS) will be responsible for:

- 2.A.1. Maintaining an updated Fire Prevention Program SOP.
- 2.A.2. Educating and training campus stakeholders regarding the Fire Prevention Program.
- 2.A.3. Developing accountability system for fire prevention and related work orders.

2.B. All Facilities Department staff will be responsible for:

- 2.B.1. Maintaining equipment properly in order to follow the Fire Prevention Program SOP in their respective areas.

2.C. All Colorado State University-Pueblo staff and faculty will be responsible for:

2.C.1. Utilizing the Fire Prevention Program SOP in their respective areas.

3. DEFINITIONS

- 3.A. COMBUSTIBLE MATERIAL – any material that will ignite and burn or will add significant heat to an ambient fire that has a flash point above 100 °F (38 °C).
- 3.B. FIRE HAZARD – A material, substance, or action that increases the likelihood of an accidental fire occurring. Many examples of fire hazards are detailed throughout this fire prevention plan.
- 3.C. FLAMMABLE - any material that will ignite and burn or will add significant heat to an ambient fire that has a flash point below 100 °F (38 °C).
- 3.D. IGNITION SOURCE – a process or event which can cause a fire or explosion. Open flames, sparks, static electricity, and hot surfaces are all possible ignition sources.

4. PROCEDURES

- 4.A. Good Housekeeping Practices to limit the risk of fires
 - 4.A.1. Minimize the storage of combustible materials inside campus buildings.
 - 4.A.2. Make sure that doors, hallways, stairs, and other exit routes are kept free of obstructions.
 - 4.A.3. Dispose of combustible waste in covered, airtight, metal containers whenever possible.
 - 4.A.4. Use and store flammable materials in well-ventilated areas away from ignition sources.
 - 4.A.5. Use only nonflammable cleaning products.
 - 4.A.6. Keep incompatible (chemically reactive) substances away from each other
 - 4.A.7. Keep equipment in good working order by inspecting electrical wiring regularly and keeping motors and machine tools free of dust and grease.
 - 4.A.8. Report all gas leaks immediately to the Facilities Department and EHS.
 - 4.A.9. Keep areas free of dust, lint, sawdust, scraps, and similar material.

4.A.10. Turn off electrical equipment when not in use.

4.B. Maintenance of Fire Equipment

4.B.1. CSU-Pueblo will comply with requirements of the National Fire Protection Association (NFPA) codes for specific equipment. Only properly trained individuals shall perform maintenance work of this equipment.

4.B.2. The following equipment is subject to the maintenance, inspection, and testing procedures.

4.B.2.a. Equipment installed to detect fuel leaks, control heating, and control pressurized systems

4.B.2.b. Portable fire extinguishers, automatic sprinkler systems, and fixed extinguishing systems

4.B.2.c. Detection systems for smoke, heat or flame

4.B.2.d. Fire alarm systems

4.B.2.e. Emergency backup systems and the equipment they support

4.C. There are several major workplace fire hazards at CSU-Pueblo.

4.C.1. Electrical Fire Hazards

4.C.1.a. Electrical system failures and misuse of electrical equipment are leading causes of workplace fires. Fires can result from loose ground connections, wiring with frayed insulation, and overloaded fuses and circuits.

4.C.1.b. To prevent electrical fires, employees should do the following:

4.C.1.b.1. Make sure that worn wires are replaced.

4.C.1.b.2. Never use extension cords as substitutes for wiring improvements.

4.C.1.b.3. Use only Underwriters Laboratory (UL) or Factor Mutual (FM) approved extension cords.

4.C.1.b.4. Check wiring in hazardous locations where the risk of fire is especially high.

4.C.1.b.5. Check electrical equipment to ensure that it is properly grounded or double insulated.

4.C.1.b.6. Ensure adequate spacing while performing maintenance.

4.C.2. Portable Heaters

4.C.2.a. EHS maintains a separate Portable Heater Standard Operating Procedure for approved portable heaters.

4.C.2.b. All portable electric heaters shall have tip-over protection that automatically shuts off the unit when it is tipped over.

4.C.2.c. There shall be adequate clearance between all heaters and combustible furnishings or other materials at all times.

4.C.3. Office Fire Hazards

4.C.3.a. Fires in offices have become increasingly likely because of the increased use of electrical equipment, such as computers, copiers, and fax machines.

4.C.3.b. To reduce office fire hazards, employees should:

4.C.3.b.1. Avoid overloading circuits with office equipment

4.C.3.b.2. Turn off nonessential electrical equipment at the end of each workday.

4.C.3.b.3. Keep storage areas clear of trash and excess paper

4.C.3.b.4. Ensure that extension cords are not placed under carpets or mats.

4.C.3.b.5. Ensure that trash and paper set aside for recycling is not allowed to accumulate in excess.

4.C.4. Cutting, Welding, and Open Flame Work

- 4.C.4.a. Cutting and welding are done by authorized personnel in designated cutting and welding areas whenever possible.
- 4.C.4.b. Adequate ventilation is provided.
- 4.C.4.c. Torches, regulators, pressure-reducing valves, and manifolds are UL listed or FM approved.
- 4.C.4.d. Oxygen-fuel gas systems are equipped with listed and approved backflow valves and pressure-relief devices.
- 4.C.4.e. Cutters, welders, and helpers are wearing eye protection and protective clothing as appropriate.
- 4.C.4.f. Cutting or welding is prohibited in areas where explosive atmospheres of gases, vapors, or dusts could develop from residues or accumulations in confined spaces.
- 4.C.4.g. Confined spaces such as tanks are tested to ensure that the atmosphere is not over ten percent of the lower flammable limit before cutting or welding in or on the tank.
- 4.C.4.h. Small tanks, piping, and containers that cannot be entered are cleaned, purged, and tested before cutting or welding on them begins.

4.C.5. Flammable and Combustible Materials

- 4.C.5.a. Dispose of flammable and combustible waste daily.
- 4.C.5.b. Keep work areas clean and free of fuel paths that could allow a fire to spread.
- 4.C.5.c. Keep flammables and combustibles away from accidental ignition sources, such as hot pates, soldering irons, or other heat or spark-producing devices.
- 4.C.5.d. Store rags in metal bins with self-closing lids.

4.C.6. Smoking is prohibited in all CSU-Pueblo buildings. Certain outdoor areas may also be designated as no smoking areas such as sporting venues. These areas are designated with No Smoking signs.

4.D. EHS shall present basic fire prevention training available to all employees upon employment, and shall maintain documentation of the training, which includes the following:

- 4.D.1. Review of 29 CFR 1910.38, including how it can be accessed
- 4.D.2. This Fire Prevention Plan, including how it can be accessed
- 4.D.3. Good housekeeping practices
- 4.D.4. Proper response and notification in the event of a fire
- 4.D.5. Instruction on the use of portable fire extinguishers
- 4.D.6. Recognition of potential fire hazards