



# ECKERD COLLEGE

## Safety Operating Procedures

(12/04)

### Fire Extinguishers

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#### **Portable Fire Extinguishers**

Portable fire extinguishers are primarily of value for immediate use on small fires. They have a limited quantity of extinguishing material and therefore must be used properly so this material is not wasted.

Extinguishers are mechanical devices. They need care and maintenance at periodic intervals to insure their readiness to operate properly and safely. Parts or interior chemicals deteriorate in time and need replacement. In most cases they are high pressure vessels and must be treated with respect and handled with care.

#### **Inspection and Maintenance of Fire Extinguishers**

The St. Petersburg Fire Department conducts an inspection program to determine whether a fire extinguisher is available, charged, and otherwise operative. Fire extinguishers are checked monthly to determine that they are in their designated place, they have not been tampered with, and there is no obvious physical damage or condition that could prevent their operation.

Maintenance requires a thorough check of the extinguisher. It includes hydrostatic testing, a thorough examination and necessary repair, recharging, or replacement. Maintenance is conducted at intervals of one year or less or when the need is indicated by an inspection or after discharge. Discharged, missing, or apparently faulty extinguishers should be reported to Campus Safety and Security x8260

#### **Training in Use of Fire Extinguishers**

Training of personnel in fire equipment use is the responsibility of NAS. Training employees in the use of emergency fire equipment requires stressing proper selection of equipment and familiarity with all types of fire extinguishers utilized in Institute buildings. Additionally, employees must be taught to judge the seriousness of fires and the correct method of extinguishing them.

## **A. Classification of Fires and Selection of Extinguishers**

Fires are classified into four general categories depending on the type of material or fuel involved. The type of fire determines the type of extinguisher that should be used to extinguish it.

- 1) Class A fires involve materials such as wood, paper, and cloth which produce glowing embers or char.
- 2) Class B fires involve flammable gases, liquids, and greases, including gasoline and most hydrocarbon liquids which must be vaporized for combustion to occur.
- 3) Class C fires involve fires in live electrical equipment or in materials near electrically powered equipment.
- 4) Class D fires involve combustible metals, such as magnesium, zirconium, potassium, and sodium.

Extinguishers will be selected according to the potential fire hazard, the construction and occupancy of facilities, hazard to be protected, and other factors pertinent to the situation.

## **B. Condition**

Portable extinguishers will be maintained in a fully charged and operable condition. They will be kept in their designated locations at all times when not being used. When extinguishers are removed for maintenance or testing, a fully charged and operable replacement unit will be provided.

