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STATE COLLEGE

Fire Prevention

Safety Department

Topics

- Goals of a Fire Prevention Plan
- Fire Prevention Strategy
- Housekeeping Issues
- Flammable and Combustible Liquids
- Emergency Evacuation
- Fire Extinguishers



Fire Prevention Goals

➤ Life Safety

- The primary goal of fire safety efforts is to protect building occupants from injury and to prevent loss of life.

➤ Property Protection

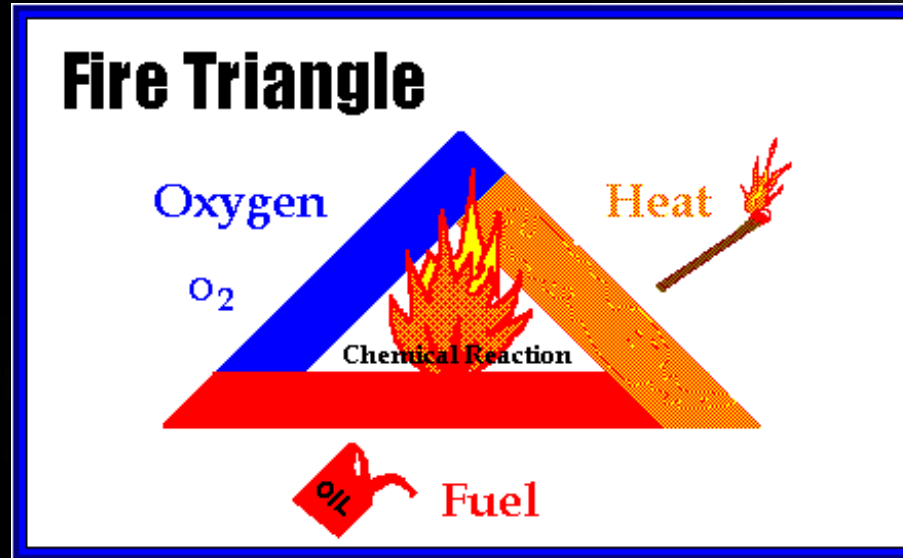
- The secondary goal of fire safety is to prevent property damage.

➤ Protection of Operations

- By preventing fires and limiting damage we can assure that work operations will continue.

The Strategy of Preventing a Fire

- A fire must have four things to ignite and maintain combustion:
 - Fuel
 - Heat
 - Oxygen
 - Chemical Reaction



- The basic strategy of fire prevention is to control or isolate sources of fuel and heat in order to prevent combustion.

If all four things are not present in sufficient quantities a fire will not ignite or a fire will not be able to sustain combustion

Housekeeping

- Good housekeeping habit are an important part of a safe workplace.
- Why is good housekeeping important?
 - To reduce amounts of flammable and combustible materials.
 - To reduce ignition hazards.
 - To ensure safe emergency evacuation of occupants.
 - To allow for quick emergency response.

BAD



GOOD



General Housekeeping Guidelines

- Work areas, aisles, walkways, stairways, and equipment should be kept clear of loose materials, trash, scraps, etc...
- Never block aisles, fire exits, emergency equipment, or alarm pull stations with equipment or materials.
- Avoid build up of combustible trash and waste such as paper, wood, cardboard, etc...
- Keep use and storage of flammable and combustible materials to a minimum.
- Clean up all spills such as grease, oil, or water immediately. A delay could result in accidents.

Storage Guidelines

- No storage is allowed in corridors, or stairwells. A cluttered hallway could slow down emergency evacuation.
- Storage must not exceed 18" below sprinkler heads or smoke detectors.
- All storage must be at least 3' from electrical panels and maintain at least 3' clearance from heating surfaces and lighting fixtures.
- Storage of combustible materials in mechanical rooms is prohibited.

Administration
Building



Flammable and Combustible Liquids

- Flammable and combustible liquids are fuel sources for fires and are present in almost every workplace.
- It is important to understand what materials in your work area are flammable and combustible so that you may properly store and isolate them from ignition.
- Flammable liquids are considered flammable because their flashpoints are <100 degreesF.
- Flashpoint: *The lowest temperature at which the vapor of a combustible liquid can be made to ignite momentarily in air*

Flammable & Combustible Liquids Continued...

- Combustible liquids have a flashpoint at or above 100°F. These liquids are less hazardous than flammable liquids but still pose a risk.
- The volatility of flammable and combustible liquids requires special storage and handling requirements.

Fire Safety-Electrical Issues

➤ Electrical hazards are the cause of numerous workplace fire each year. Faulty electrical equipment produces heat and sparks that serve as ignition sources in the presence of flammable and combustible materials.\

➤ Examples of common ignition hazards:

➤ Overloading circuits

➤ Use of unapproved electrical devices

➤ Damaged or worn wiring



Electrical Fire Safety

- Extension Cords
 - Extension cords are not approved for permanent use.
- Regularly check electrical cords for defaults such as frays, brittleness, or broken wires.
- Never place electrical cords in high traffic areas where they can be damaged by being stepped on or run over by equipment or put through windows, doors, or anywhere where they could be damaged easily

