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# OBJECTIVE

**COMPANY NAME** will maintain a safe and healthy work environment in an ongoing effort to protect each employee from potentially hazardous or unsafe conditions. It is the goal of **COMPANY NAME** to insure that Personnel will at no time suffer any adverse health effects or injuries related to their work environment.

**COMPANY NAME** has chosen to establish a Fire Protection / Extinguishers Program for emergencies that could arise from fire.

The Fire Protection / Extinguishers Program is essential to the safety of **COMPANY NAME** employees and to inform personnel of the dangers of fire.

# BACKGROUND

**COMPANY NAME** will ensure that all employees are trained in the proper use of portable fire extinguishers which are provided for incipient (small stage) firefighting purposes only. Various fire suppression cylinder types are located about the Main Office locations, at host-facility job-site trailers, and on each Company service vehicle.

The fire extinguishers are identified by their red-colored shell, or red-painted background color where they are installed, as well as fluorescent red and white signs above each installation location.

# GENERAL GUIDELINES

* All fires on this Company's premises shall be reported to supervisory personnel immediately. A written incident report will be filed later by the immediate supervisor in charge of that area.
* Good housekeeping and preventative maintenance on all equipment shall be maintained to prevent fire hazards from occurring
* Smoking must be confined to areas specifically designated by this Company's management. Smoking is not permitted while around any active hydrocarbon or compressed gas cylinder storage location, or at any host-facility's designated "No Smoking" areas.
* Containers of flammable substances will be stored in fireproof cabinets and no appreciable combustible materials will be stored within 35 ft. of any spark producing operation.
* Oily/greasy rags, paper waste and other flammable trash will be removed and disposed of in covered metal containers or appropriately marked safety cans, or in over-pack spill containers, whenever these sources are generated, for the prevention of spontaneous combustion.
* Flammable liquids such as various fuels or solvents will be transported in appropriately marked safety cans with their contents identified. NO glass container use will be allowed.
* Matches or cigarette lighters should not be taken into any area where an explosive atmosphere may be present.
* The use of gasoline as a cleaning agent on Company property is strictly forbidden.
* All compressed gas cylinders will be stored in their appropriately marked secured (chained) locations, and capped when not in use. If in use, all hook-up hoses and equipment used for hot-work purposes will be inspected prior to use. Defective equipment found shall not be used, but instead, tagged out of service or repaired before being used again.
* All leaks of flammable liquids will be reported immediately and repaired if practicable. If immediate repair is not possible, all spark-producing operations within the vicinity of the leak or spill will be halted, and adequate warning signs or barricade tape will be posted until the hazard is controlled or eliminated.
* All fire fighting equipment is for fire use only and will be placed **in** designated locations when not **in use.** It must be accessible at all times to all employees, so items cannot be stored on/near/around it. Fire extinguishers that have been partially or completely used will be removed from service and replaced by similar equipment that has been inspected and authorized for service. Spent containers will temporarily be placed at either any Job-site Trailer or each individual Main Office location.

# FIRE EXTINGUISHING THEORY

Fire is a chemical reaction that occurs when a fuel rapidly unites with oxygen in the

presence of a heat source, and a flame is produced.

Four elements are necessary to produce and support a fire, and they are:

* Fuel source (solid - liquid - gas)
* Heat source (a type of energy)
* Oxygen source (gas for ignition and flame support)
* Chemical chain reaction (occurs when fuel, heat & oxygen are united in the proper proportions to create a fire).

If any one of these four elements is eliminated, the fire will go out. There are four ways that a fire can be extinguished:

* Isolate, contain, separate, cover, or remove the fuel source.
* Remove the heat source by applying a cooling agent, which absorbs the heat. Water is the most common cooling agent used to remove the heat from the reaction.
* Separate the oxygen from other essentials that make a fire by smothering the fire with a wet blanket, throwing soil or sand on it, or covering it with a chemical foam or water fog.
* Stop the chemical reaction by applying certain chemical substances that break up this chain reaction, such as sodium bicarbonate (baking soda) or potassium bicarbonate ("purple K") or sodium monophosphate (ABC dry chemical). Application of these chemicals will result in a reduction of the combustion rate and the fire can be extinguished.

# FIRE CLASSIFICATIONS

There are 3 basic fire classification types present here at **COMPANY NAME** facilities or most host-facility job-sites, and several methods of extinguishing for each:

* **CLASS "A"** fires are those in paper, wood, cardboard, textiles, etc. where water, foam or water-based liquids are used to extinguish the fire.
* **CLASS "B"** fires are those of flammable liquid such as gasoline, diesel, grease, oil, paint, solvents, etc., where dry chemicals, carbon dioxide or water in a sprayfog form are used to extinguish the fire.
* **CLASS "C"** fires are those in electrical equipment, where dry chemical or carbon dioxide are used to extinguish the fire. **(NEVER USE WATER** to extinguish this type of fire due to electrical shock hazards).

# INCIPIENT STAGE - PORTABLE FIREFIGHTING PROCEDURE VENTILATION

If you discover a fire in its early incipient (small) stage, initiate the following procedure if on **COMPANY NAME** property: (if servicing a host-facility client, observe that Company's contractor requirements concerning fire prevention.)

* Remain calm
* Seek out and remove the closest fire extinguisher from its securing location in the area of occurrence
* Place yourself a safe distance upwind from the fire location
* Pull the securing pin/break-away seal from the top of the handle which prevents accidental operation of the unit
* Aim the spray nozzle at the base of the fire (angle 45 degree)
* Squeeze or depress the trigger handle to test performance
* Sweep from side to side using a steady controlled motion until the fire is extinguished or contents emptied (approximately 8 -25 seconds depending on contents/size).
* Retreat a safe distance from the previous fire location by stepping backwards, never taking your eyes away from a potential re-flash. If you are unsuccessful at extinguishing the fire and no other portable extinguisher is in close proximity for use, notify **COMPANY NAME** management immediately as a fire doubles in size every 10 seconds. The host-facility's or outside professional fire fighting services may then be required, and the Emergency Response Plan enacted for evacuation.

# FIRE EXTINGUISHERS – MOUNTING, ACCESS, INSPECTIONS

Extinguishers are not to be left on the floor, a scaffold or on the ground. They should be mounted at least 4" off of the ground. They are to be mounted on a wall, handrail, barricade, etc.

Extinguishers that have a total weight of more than 40 pounds are to be mounted with the top of the extinguisher no more than 42 inches above the floor. Extinguishers weighing 40 pounds or less may be mounted with the top as high as 5 feet above the floor. (Mounting all extinguishers at the 42 inch height is a good habit).

Extinguishers should be located where they can be easily seen. In cases where this is not practical, signs or red paint marking need to be added to identify the location of the extinguisher.

Keep trash and stored material away from extinguishers to prevent blockage of the access to the extinguisher.

**COMPANY NAME** shall ensure that portable fire extinguishers are visually inspected at least monthly and inspected annually as part of a thorough maintenance check of the integrity of the device.

A fire extinguisher, rated not less than 2A, shall be provided for each 3,000 square feet of the protected building area, or major fraction thereof. Travel distance from any point of the protected area to the nearest fire extinguisher shall not exceed 100 feet.

One 55-gallon open drum of water with two fire pails may be substituted for a fire extinguisher having a 2A rating.

A 1/2-inch diameter garden-type hose line, not to exceed 100 feet in length and equipped with a nozzle, may be substituted for a 2A-rated fire extinguisher, providing it is capable of discharging a minimum of 5 gallons per minute with a minimum hose stream range of 30 feet horizontally. The garden-type hose lines shall be mounted on conventional racks or reels. The number and location of hose racks or reels shall be such that at least one hose stream can be applied to all points in the area.

One or more fire extinguishers, rated not less than 2A, shall be provided on each floor. In multistory buildings, at least one fire extinguisher shall be located adjacent to stairway.

Extinguishers and water drums, subject to freezing, shall be protected from freezing.

A fire extinguisher, rated not less than 10B, shall be provided within 50 feet of wherever more than 5 gallons of flammable or combustible liquids or 5 pounds of flammable gas are being used on the jobsite. This requirement does not apply to the integral fuel tanks of motor vehicles.

A thorough examination of each extinguisher shall be conducted annually by an individual trained to examine, repair, and recharge extinguishers. An inspection tag is to be attached to each extinguisher showing the date of the annual examination, the date of the recharge, and the initials of the individual making the examination. Stored pressure extinguishers do not require an internal examination. A written record shall be made of the annual maintenance date. This record shall be retained for one year after the last entry or the life of the shell whichever is less.

Every fire extinguisher is to be visually inspected at least once a month. The inspection is to include:

* + Proper location
  + Fully charged
  + Seal wire not broken
  + Free of any obvious defects or damage
  + Inspection tag is current

Extinguishers more than five (5) years old may need a hydrostatic test if they are to remain in service.

# TRAINING

Where **COMPANY NAME** has provided portable fire extinguishers for employees use in the workplace, training shall be provided to educate and familiarize employees with the general principles of fire extinguisher use, the hazards involved in incipient stage firefighting and general safe use of the extinguisher. Training shall be provided prior to initial assignment and annually thereafter.

Work environments, classified as hot work, sometimes require the use of a trained fire watch. Whenever personnel are assigned as fire watch they shall be properly trained. Fire watches are to be at the site prior to beginning hot work and thirty minutes after hot work is complete.

Fire extinguisher training shall be conducted when the employee is initially assigned and at least annually thereafter and shall include:

* **Classes of fire extinguishers (A, B, C, ABC & D)**
* Class “A” – common combustibles, i.e. wood, cloth, rubber, plastic, etc
* Class “B” – Flammable liquids
* Class “C” – Electrical
* Class “D” – Burning metals, i.e. magnesium, batteries, etc
* Hazards involved in incipient stage fire fighting
* General safe use of the extinguisher including the PASS method:
* P – Pull, A – Aim, S – Squeeze, S - Sweep

# RECORDS

All training will be documented and maintained in the employee's safety file. All inspection and maintenance records will be maintained by **COMPANY NAME** management for the serviceable life of this equipment.

* Training certificates shall be created and stored by the company for each employee trained.
* Training records shall be kept for no less than 3 years.
* Annual Fire Extinguisher Inspection Logs shall be kept by the company for no less than 5 years.

# CONCLUSION

Non-compliance by any **COMPANY NAME** employee with any part of this described program will result in disciplinary action as outlined in the Company's Disciplinary Program.