

STANDARD PRACTICE INSTRUCTION

DATE IMPLEMENTED: 04 April 2019

SUBJECT: Fire Extinguisher Safety

REGULATORY STANDARDS: OSHA - 29 CFR 1910.157
NFPA 10

BASIS: Over 150 major fires occur in workplaces on an annual basis. Fire is the third leading cause of accidental deaths in the United States. The Occupational Safety and Health Administration (OSHA) has established Federal regulations in 29 Code of Federal Regulation (CFR), §1910.157 for portable fire extinguishers and their use. OSHA has a general directive for employers to maintain a workplace free of hazards. Under the authority of this directive, OSHA requires that "employers shall provide portable fire extinguishers and shall mount, locate, and identify them so that they are readily accessible to employees without subjecting employees to possible injury." OSHA requires that education and training be provided to employees as well.

GENERAL: Nowland Associates, Inc. will ensure that potential fire hazards within our facility(s) are evaluated. This standard practice instruction is intended to address comprehensively the issues of; evaluating and identifying potential fire hazards, providing firefighting equipment, and providing training concerning these hazards to employees.

RESPONSIBILITY: The company Safety Officer is solely responsible for all facets of this program and has full authority to make necessary decisions to ensure the success of the program. The Safety Officer is the sole person authorized to amend these instructions and is authorized to halt any operation of the company where there is a danger of serious personal injury.

Contents of the Fire Extinguisher Program

- 1. Written Program.**
- 2. Selection and Distribution of Fire Extinguishers.**
- 3. Labeling of Fire Extinguishers.**
- 4. General Requirements.**
- 5. Inspection, Maintenance and Testing.**
- 6. Training and Education.**

Nowland Associates, Inc. Fire Extinguisher Program

1. Written Program. Nowland Associates, Inc. will review and evaluate this standard practice instruction:

- On an annual basis
- When changes occur to 29 CFR, that prompt revision of this document
- When facility operational changes occur that require a revision of this document
- When there is an accident or close-call that relates to this area of safety
- Review the program any time these procedures fail

Effective implementation of this program requires support from all levels of management within this company. This written program will be communicated to all affected personnel. It encompasses the total workplace, regardless of the number of workers employed or the number of work shifts. It is designed to establish clear goals and objectives.

2. Selection and Distribution. Portable fire extinguishers shall be provided for employee use and selected and distributed based on the classes of anticipated workplace fires and on the size and degree of the hazard which would affect their use. Fire extinguishers used by this company are for four classes of fires:

Class A Fire Extinguishers. Use on ordinary combustibles or fibrous material, such as wood, paper, cloth, rubber and some plastics. Travel distance for employees to any extinguisher is 75 feet (22.9 m) or less.

Class B Fire Extinguishers. Use on flammable or combustible liquids such as gasoline, kerosene, paint, paint thinners and propane. Travel distance from the Class B hazard area to any extinguisher is 50 feet (15.2 m) or less.

Class C Fire Extinguishers. Use on energized electrical equipment, such as appliances, switches, panel boxes and power tools. Travel distance from the Class C hazard area to any extinguishing agent is 50 feet (15.2 m) or less.

Class D Fire Extinguishers. Use on combustible metals, such as magnesium, titanium, potassium, and sodium. Travel distance from the combustible metal working area to any extinguishing agent is 75 feet (22.9 m) or less.

3. Labeling of Fire Extinguishers. All fire extinguishers used by this company will be labeled in accordance with NFPA 10, Standard for Portable Fire Extinguishers. Any locations where a fire extinguisher is mounted will also comply with NFPA 10 for labeling purposes.

4. General Requirements: Nowland Associates, Inc. has provided portable fire extinguishers for employee use in the event of an incipient fire. All fire extinguishers shall be mounted no higher and no lower than four (4) feet from the floor. The following key personnel have specific responsibilities:

A. Safety Officer

- Manage the Fire Extinguisher Program.
- Schedule the proper training for employees.
- Update the program when necessary.
- Record and maintain training records.
- Ensure monthly/annual inspections are being conducted.

B. Maintenance Supervisor

- Replace used and damaged fire extinguisher(s).
- Reporting to either the Safety Officer or Purchasing that the fire extinguisher has been used or damaged.

C. Department and First Line Supervisors

- Ensure all fire extinguishers are accessible.
- Ensure employees are aware of where extinguishers are located.
- Make sure extinguishers are clean and are free from obstructions.
- Report to the Safety Officer that a fire extinguisher has been used or damaged.

4.1 All fire extinguishers shall be maintained as follows:

- Numbered to identify their proper location (see attached master list)
- Fully charged and in operable condition
- Clean and free of defects
- Readily accessible at all times

Note: Nowland Associates, Inc. will not use portable fire extinguishers using carbon tetrachloride or chlorobromomethane extinguishing agents. Portable fire extinguishers that have soldered or riveted shell self-generating soda acid or self-generating foam or gas cartridge water type portable fire extinguishers which are operated by inverting the extinguisher to rupture the cartridge or to initiate an uncontrollable pressure generating chemical reaction to expel the agent shall be removed from the facility permanently.

5. Inspection, Maintenance, And Testing. Nowland Associates, Inc. is responsible for the inspection, maintenance, and testing for all fire extinguishers on the premises. Nowland Associates, Inc. will assure that all portable fire extinguishers are subject to the following:

- Monthly visual inspections
- Annual maintenance check
- Six (6) year tear down maintenance
- Twelve (12) year hydrostatic test
- Extinguishers are promptly recharged
- Extinguishers are compatible

6. Training and Education. The purpose of this section is to establish training procedures which are necessary for the proper use and understanding of a fire and extinguishing the fire. Selected employees will be provided with an educational program to familiarize them with the general principles of fire extinguisher use and the hazards involved with incipient stage firefighting. Training will be provided prior to initial assignment. Training will require **annual** updating to ensure the proper procedures are being followed.

6.1 Initial Training Outline.

- A. General principles of a fire.
- B. Hazards employed with an incipient stage fire(s).
- C. When to "back off" (evacuate) of an incipient stage fire(s).
- D. General fire principles of a fire extinguisher.
- E. Hazards employed with the use a fire extinguisher.
- F. Use of a fire extinguisher (hands-on).

6.2 Retraining. Retraining shall reestablish employee proficiency and introduce new or revised control methods and procedures, as necessary. Retraining shall be provided for all authorized and affected employees whenever there is:

- A change in job assignment.
- A change in machines, equipment or processes that present a new potential fire hazard.
- There is a change in the fire prevention procedures.
- This employer has reason to believe that there are deviations from or inadequacies in the employee's knowledge or use of fire extinguishers or fire prevention procedures.
- Annually

6.3 Training Documentation. All training will be documented, and each employee's understanding will be subject to a "hands-on" test. Documentation will consist of, as a minimum, the employee's name, the trainer's name, the date of the training, and an outline of training provided.

6.3.1 Certification. This employer shall certify that employee training has been accomplished and is being kept up to date.