


<b><i>HEALTH AND SAFETY MANUAL</i></b>		
Title: Fixed Extinguishing Systems		
Approved by: Greg Savoy		1/1/08

1 Purpose/Scope:

The purpose this program is to ensure fixed extinguishing systems are installed, maintained and operational to protect employees and assets. This program does not include automatic sprinkler systems.

Applies to all fixed extinguishing systems installed meeting OSHA requirements and also applies to fixed systems not installed to meet a particular OSHA standard but which, by means of their operation, may expose employees to possible injury, death, or adverse health consequences caused by the extinguishing agent. Such systems are only subject to the requirements of paragraphs 3.4 – 3.6 and 3.11 of this program.

2 Responsibilities:

2.1 Managers with facility responsibility shall ensure that all devices and equipment constructed and installed are approved for the purpose intended. These systems must be maintained and kept in an operational state of readiness.

3 Requirements:

3.1 Components and agents must be designed and approved for use on the specific fire hazards they are expected to control or extinguish.

3.2 Inoperable system - if for any reason a fixed extinguishing system becomes inoperable, employees must be notified and necessary temporary precautions taken to assure their safety until the system is restored to operating order.

3.2.1 Any defects or impairments shall be properly corrected by qualified personnel.

3.3 Foam and water spray systems must be designed to be effective in at least controlling fire in the protected area or on protected equipment.

3.4 Drainage of water spray systems must be directed away from areas where employees are working and no emergency egress will be permitted through the drainage path.

- 3.5 Alarm or signaling system. - a distinctive alarm or signaling system capable of being perceived above ambient noise or light levels must be in place to indicate when the extinguishing system is discharging.
  - 3.5.1 Discharge alarms are not required on systems where discharge is immediately recognizable.
- 3.6 Hazard warnings - effective safeguards must be provided to warn employees against entry into discharge areas where the atmosphere remains hazardous to employee safety or health.
  - 3.6.1 Hazard warning or caution signs must be posted at the entrance to, and inside of, areas protected by fixed extinguishing systems which use agents in concentrations known to be hazardous to employee safety and health.
- 3.7 Fixed extinguishing systems must be inspected annually by a person knowledgeable in the design and function of the system to assure that the system is maintained in good operating condition.
- 3.8 At least semi-annually the weight and pressure of refillable containers must be checked.
  - 3.8.1 If the container shows a loss in net content or weight of more than 5 percent, or a loss in pressure of more than 10 percent, it must be subjected to maintenance.
- 3.9 Factory charged non-refillable containers which have no means of pressure indication must be weighed at least semi-annually.
  - 3.9.1 If a container shows a loss in net weight of more than 5 percent it must be replaced.
- 3.10 Inspection and maintenance dates must be recorded on the container, on a tag attached to the container, or in a central location.
  - 3.10.1 A record of the last semi-annual check must be maintained until the container is checked again or for the life of the container, whichever is less.
- 3.11 Chlorobromomethane or carbon tetrachloride must not be used as an extinguishing agent where employees may be exposed.

#### 4 References:

- 4.1 OSHA Code of Federal Regulations CFR, Parts 1910.160
- 4.2 National Fire Protection Association Codes:
  - 4.2.1 15 Water Spray Fixed Systems
  - 4.2.2 16 Deluge Foam-Water Systems
  - 4.2.3 16A Closed Head Foam-Water Systems

4.2.4 17 Dry Chemical Systems

4.2.5 17A Wet Chemical Systems

5 Exhibits:

None