

## **MSIB 05-13 Firefighting Equipment Servicing Requirements**

Any owner/operator utilizing a servicing company that does not meet the below criteria or conduct, inspect, and document the servicing and testing as listed below and in accordance with Western Alaska MSIB 05-13 may be subject to re-servicing and testing of these system and extinguishers, and may be restricted from carrying passengers.

### **Fixed CO2/Halon Systems:**

Fixed CO2/Halon systems shall be serviced and tested in accordance with references (a), (b), and (e) as outlined below. The operation and condition of the system must be verified by a Coast Guard Sector Anchorage Marine Inspector during the annual inspection of the system. Servicing must be completed by a competent person who has been thoroughly trained and any hydrostatic testing of cylinders must be completed by a person holding a current re-qualification number (RIN) as per 49 CFR 180.209(g).

The following is a list of all items required to be inspected, tested, serviced, and documented by a state certified servicing company annually in the presence of a Marine Inspector:

1. Visual inspection of the material condition of the entire system including but not limited to all cylinders, time delays, piping, hoses, discharge nozzles, pressure gauge, controls, release boxes, switches, pull cables, wiring, and placards.
2. Cylinders shall be removed from the mounting racks and an annual weighing of the CO2/Halon cylinders using a certified scale shall be conducted to ensure no weight drop greater than 10 percent of the net content for CO2 cylinders and 5 percent of the net content for Halon cylinders. If at any time a cylinder has a weight drop greater than that mentioned above the cylinder must be replaced or refilled.
3. Inspect cylinder and time delay for the date of the last hydrostatic test. Every 12 years or if more than 5 years since the last hydrostatic test and the cylinder has been discharged a hydrostatic test of all CO2 cylinders and time delays shall be conducted. As per reference (e), Halon cylinders do not need to be hydrostatically tested unless the bottle has been discharged or a visual inspection causes concern.
4. Inspect flexible hoses and/or previous documentation for last hydrostatic test date. Every 5 years flexible hose shall be removed from all CO2 systems and hydrostatically tested in accordance with reference (b). For Halon systems, reference (e) allows flexible hose hydrostatic testing to be conducted every 12 years.

5. Operationally test the entire system in accordance with reference (a), (b), (e) and the manufacturer's specifications using a dry, non-corrosive gas such as nitrogen or carbon dioxide.
  - a. Prior to beginning the operational test, the attending Marine Inspector, vessel operator, and servicing company representative shall ensure no personnel are in the space during the test and follow all safety precautions listed in reference (b).
  - b. The operational test shall include the proper operation of all pull stations, shut down switches and controls, time delays, discharge nozzle clearance, and alarms.
  - c. As per references (a) and (b), time delays that are not accurate to within plus 20 percent or minus 0 percent of the rated time at 70°F shall be replaced. The manufacturer's manual will have a variance table for the ambient temperature which the system is being tested at and the exact time of the delay shall be noted on the servicing company's documentation.
  - d. For proper testing of the discharge nozzles, servicing companies shall attach an indicator such as a plastic bag or glove over each nozzle, when the test is completed, if the indicator was blown off the nozzle, then the nozzle may be clogged.
  - e. At the end of the operational test, each dirt trap shall be removed and the inside of the systems piping shall be inspected for debris.

### **Pre-Engineered Clean Agent Systems:**

Pre-engineered clean agent systems shall be serviced and tested in accordance with reference (c) and the manufactures specifications as outlined below. The operation and servicing of the system does not need to be verified with a Coast Guard Marine Inspector present, but all items listed below must be completed by a thoroughly trained person and properly documented for review by a Coast Guard Marine Inspector. Any cylinders requiring hydrostatic testing must be completed by a person holding a current re-qualification number (RIN) as per 49 CFR 180.209(g).

The following is a list of all items required to be inspected, tested, serviced, and documented by state certified servicing company annually:

1. Visual inspection of the material condition of the entire system including but not limited to the cylinder, piping, hoses, discharge nozzles, pressure gauge, controls, switches, pull cables, wiring, and placards.
2. Cylinder shall be removed from the mounting racks and an annual weighing of the clean agent cylinder using a certified scale shall be conducted to ensure no

- weight drop greater than 10 percent of the net content for the cylinder. If at any time a cylinder has a weight drop greater than 10 percent the cylinder must be replaced or refilled.
3. Inspect cylinder for the date of the last hydrostatic test. Every 12 years or if more than 5 years since the last hydrostatic test and the cylinder has been discharged a hydrostatic test of all clean agent cylinders shall be conducted.
  4. Inspect flexible hoses and/or previous documentation for last hydrostatic test date. Every 5 years flexible hose shall be removed from all clean agent systems and hydrostatically tested in accordance with reference (c).

### **Semi-Portable/Portable Fire Extinguishers:**

Semi-portable and portable fire extinguishers shall be serviced and tested in accordance with reference (d) and the manufactures specifications as outlined below. The operation and servicing of the extinguishers do not need to be verified with a Coast Guard Marine Inspector present, but all items listed below must be completed by a thoroughly trained person and properly documented for review by a Coast Guard Marine Inspector.

The following is a list of all items required to be inspected, tested, serviced, and documented by thoroughly trained person annually:

1. Visual inspection of the material condition of each semi-portable/portable fire extinguisher including but not limited to the cylinder, piping, hoses, discharge nozzles,, wheels, and pressure gauges.
2. Cylinder shall be weighed annually using a certified scale to ensure no weight drop greater than 10 percent of the net content for the cylinder. If at any time a cylinder has a weight drop greater than 10 percent the cylinder must be replaced or refilled.
3. Inspect cylinder or previous documentation for the date of the last hydrostatic test. Hydrostatic test intervals for semi-portable/portable fire extinguishers differ depending on the type of agent, see reference (d) for requirements.
4. Inspect flexible hoses and/or previous documentation for last hydrostatic test date. Every flexible hose shall be removed from semi-portable/portable fire extinguisher and hydrostatically tested in accordance with reference (d) at the same interval as the extinguisher.
5. Documentation completed by a fire servicing company or a thoroughly trained representative for the vessel must specify the number of extinguishers on board, their location, and all the information listed above. Additionally, hydrostatic testing of fire extinguishers shall be completed by a trained person holding a current re-qualification number (RIN) as per 49 CFR 180.209(g).