§ 154.903 Inert gas systems: General.

(a) Inert gas carried or generated to meet §§154.901, 154.902, and 154.1848 must be non-flammable and non-reactive with the cargoes that the vessel is certificated to carry and the materials of construction of the cargo tanks, hold and interbarrier spaces, and insulation.

(b) The boiling point and dewpoint at atmospheric pressure of the inert gas must be below the temperature of any surface in those spaces or −45 °C (−49 °F), whichever is warmer.

(c) For the temperatures and pressures at which the gas is stored and used, storage vessels and inert gas piping must meet §§154.450 and 154.500 respectively.

§ 154.904 Inert gas system: Controls.

The inert gas system must have:

(a) At least one check valve in the cargo area to prevent the back flow of cargo vapor into the inert gas system, or another means specially approved by the Commandant (CG–522);

(b) If the inert gas system is in the machinery space or another space outside the cargo area, a second check valve in the cargo area meeting paragraph (a) of this section;

(c) Automatic and manual inert gas pressure controls; and

(d) Valves to isolate each inerted space.

§ 154.906 Inert gas generators.

The inert gas generator must:

(a) Produce an inert gas containing less than 5% oxygen by volume;

(b) Have a device to continuously sample the discharge of the generator for oxygen content; and

(c) Have an audible and visual alarm in the cargo control station that alarms when the inert gas contains 5% or more oxygen by volume.

§ 154.908 Inert gas generator: Location.

(a) Except as allowed in paragraph (b) of this section, an inert gas generator must be located in the main machinery space or a space that is not in the cargo area and does not have direct access to any accommodation, service, or control space.

(b) An inert gas generator that does not use flame burning equipment may be located in the cargo area if specially approved by the Commandant (CG–522).

§ 154.910 Inert gas piping: Location.

Inert gas piping must not pass through or terminate in an accommodation, service, or control space.

§ 154.912 Inerted spaces: Relief devices.

Inerted spaces must be fitted with relief valves, rupture discs, or other devices specially approved by the Commandant (CG–522).