§149.110

### \$149.110 What are the requirements for pipeline end manifold shutoff valves?

Each pipeline end manifold must have a shutoff valve capable of operating both manually and from the pumping platform complex.

# §149.115 What are the requirements for blank flange and shutoff valves?

Each floating hose string must have a blank flange and a shutoff valve at the vessel's manifold end.

#### §149.120 What are the requirements for manually operated shutoff valves?

Each oil and natural gas transfer line, passing through an SPM buoy, must have a manual shutoff valve on the buoy.

#### §149.125 What are the requirements for the malfunction detection system?

(a) Each oil and natural gas system, between a pumping platform complex and the shore, must have a system that can detect and locate leaks and other malfunctions, particularly in high-risk areas.

(b) The marine transfer area on an oil deepwater port must be equipped with a monitoring system in accordance with 154.525 of this chapter.

(c) A natural gas deepwater port must be equipped with gas detection equipment adequate for the type of transfer system (including storage and re-gasification) used. Commandant (G-M) will evaluate proposed leak detection systems for natural gas on an individual basis.

## §149.130 What are the requirements for the cargo transfer system alarm?

(a) Each cargo transfer system must have an alarm to signal a malfunction or failure in the system.

(b) The alarm must sound automatically in the control room and:

(1) Be capable of being activated at the pumping platform complex;

(2) Have a signal audible in all areas of the pumping platform complex, except in areas under paragraph (b)(3) of this section;

(3) Have a high intensity flashing light in areas of high ambient noise levels where hearing protection is required under 150.615 of this chapter; and

(4) Be distinguishable from the general alarm.

(c) Tankers calling on unmanned deepwater ports must be equipped with a transfer system alarm described in this section.

#### §149.135 What should be marked on the cargo transfer system alarm switch?

Each switch for activating an alarm, and each audio or visual device for signaling an alarm, under 149.130, must be identified by the words ''OIL TRANS-FER ALARM'' or ''NATURAL GAS TRANSFER ALARM'' in red letters at least 1 inch high on a yellow background.

#### §149.140 What communications equipment must be on a deepwater port?

(a) Each deepwater port must have the following communications equipment:

(1) A means of continuous two-way voice communication among the deepwater port and the tankers, support vessels, and other vessels operating at the port. The means must be usable and effective in all phases of a transfer and in all conditions of weather at the port;

(2) A means to effectively indicate the need to use the communication system required by paragraph (a) of this section, even if the means is the communication system itself; and

(3) Equipment that, for each portable means of communication used to meet the requirements of this section, is:

(i) Certified under 46 CFR 111.105-11 to be operated in Group D, Class 1, Division 1 Atmosphere; and,

(ii) Permanently marked with the certification required in paragraph (a)(3)(i) of this section. As an alternative to this marking requirement, a document certifying that the portable radio devices in use are in compliance with this section may be kept at the deepwater port.

(b) The communication system of the tank ship mooring at an unmanned port will be deemed the primary means