

Policy Act of 1969 (NEPA), Pub.L. 91-190, 42 U.S.C. 4321, *et seq.*; National Historic Preservation Act of 1996 (NHPA), Pub.L. 89-665, 16 U.S.C. 470, *et seq.*; Native American Graves Protection and Repatriation Act (NAGPRA), 25 U.S.C. 3001, *et seq.*; Noise Control Act of 1972, Pub.L. 92-574, 42 U.S.C. 4901, *et seq.*; Pollution Prevention Act of 1990 (PPA), 42 U.S.C. 13101-13109, *et seq.*; Protection and Enhancement of Cultural Environmental Quality, E.O. 11593, 36 FR 8921; Protection and Enhancement of Environmental Quality, E.O. 11514, 35 FR 4247; Protection of Children from Environmental Health and Safety Risks, E.O. 13045, 62 FR 19885; Protection of Wetlands, E.O. 11990, 42 FR 26961; Recreational Fisheries, E.O. 12962, 60 FR 307695; Requiring Agencies to Purchase Energy Efficient Computer Equipment, E.O. 12845, 58 FR 21887; Resource Conservation and Recovery Act of 1976 (RCRA), Pub.L. 94-580, 42 U.S.C. 6901, *et seq.*; Responsibilities of Federal Agencies to Protect Migratory Birds, E.O. 13186, 66 FR 3853; Safe Drinking Water Act (SDWA), Pub.L. 93-523, 42, U.S.C. 201, *et seq.*; Toxic Substances Control Act (TSCA), 7 U.S.C. 136, *et seq.*; and Wild and Scenic Rivers Act, Pub.L. 90-542, 16 U.S.C. 1271, *et seq.*

(b) In addition, the port must comply with the applicable NEPA requirements for preparation of a single, detailed environmental study.

PART 149—DEEPWATER PORTS: DESIGN, CONSTRUCTION, AND EQUIPMENT

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Subpart A—General

§149.1 What does this part do?

This part provides requirements for the design and construction of deepwater ports. It also provides the requirements for equipment for deepwater ports.

§149.5 What definitions apply to this part?

Definitions applicable to this part appear in 33 CFR 148.5. In addition, the

following terms are used in this part and have the indicated meanings:

Accommodation module means a module with one or more accommodation spaces that is individually contracted for and may be used on one or more facilities.

Major conversion means a conversion, as determined by the Commandant (G-M), that substantially changes the dimensions of a facility, substantially changes the water depth capability of a fixed facility, substantially changes the carrying capacity of a floating facility, changes the type of a facility, substantially prolongs the life of a facility, or otherwise so changes the facility that it is essentially a new facility.

Service space means a space used for a galley, pantry containing cooking appliances, storeroom, or workshop other than those in industrial areas and trunks to those spaces.

Sleeping space means a space provided with bunks for sleeping.

§ 149.10 Where can I obtain a list of Coast Guard approved equipment?

Where equipment in this subchapter must be of an approved type, the equipment must be specifically approved by the Commandant (G-M), and the Marine Safety Center for engineering equipment. A list of approved equipment, including all of the approval series, is available at: <http://cgmix.uscg.mil/Equipment>.

§ 149.15 What is the process for submitting alterations and modifications affecting the design and construction of a deepwater port?

(a) Alterations and modifications affecting the design and construction of a deepwater port must be submitted to Commandant (G-M) for review and approval if:

- (1) A license has not yet been issued; or,
- (2) A license has been issued but the port has not commenced operations; or,
- (3) The alteration and modification are deemed a major conversion; or,
- (4) The alteration or modification substantially changes the manner in which the port operates or is not in accordance with a condition of the license.

(b) All other alterations and modifications to the deepwater port must be submitted to the OCMI for review and approval.

(c) Approval for alterations and modifications proposed after a license has been issued will be contingent upon whether the proposed changes will affect the way the port operates or any conditions imposed in the license.

(d) The licensee is not authorized to proceed with alterations prior to approval by Commandant (G-M) for the conditions outlined in paragraph (a) and approval by the cognizant OCMI as required in paragraph (b) of this section.

(e) Commandant (G-M), during the review and approval process of a proposed alteration or modification, may consult with the Marine Safety Center and cooperating federal agencies possessing relevant technical expertise.

Subpart B—Pollution Prevention Equipment

§ 149.100 What does this subpart do?

This subpart provides requirements for pollution equipment on deepwater ports.

§ 149.103 What are the requirements for discharge containment and removal material and equipment?

(a) Each deepwater port must have a facility response plan that meets the requirements outlined in subpart F of part 154 of this chapter and be approved by the cognizant COTP.

(b) The facility response plan must identify adequate spill containment and removal equipment for port-specific spill scenarios.

(c) Response equipment and material must be pre-positioned for ready access and use onboard the deepwater port.

§ 149.105 What are the requirements for the overflow and relief valves?

(a) Each oil and natural gas transfer system (OTS/NGTS) must include a relief valve that, when activated, prevents pressure on any component of the OTS/NGTS from exceeding its maximum rated pressure.

(b) The transfer system overflow or relief valve must not allow a discharge into the sea.

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§ 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;

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(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 TRANSFER 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

of communicating with support vessels, shore side, etc.

§ 149.145 What are the requirements for curbs, gutters, drains, and reservoirs?

Each pumping platform complex must have enough curbs, gutters, drains, and reservoirs to collect, in the reservoirs, all oil and contaminants not authorized for discharge into the ocean according to the port's National Pollution Discharge Elimination System (NPDES) permit.

Subpart C—Lifesaving Equipment

§ 149.300 What does this subpart do?

This subpart provides requirements for lifesaving equipment on deepwater ports.

MANNED DEEPWATER PORT
REQUIREMENTS

§ 149.301 What are the requirements for lifesaving equipment?

(a) Each deepwater port on which at least one person occupies an accommodation space for more than 30 consecutive days, in any successive 12-month period, must comply with the requirements for lifesaving equipment in this subpart.

(b) Each deepwater port, not under paragraph (a) of this section, must comply with the requirements for lifesaving equipment for unmanned deepwater ports in this subpart.

§ 149.302 What are the requirements when lifesaving equipment is repaired or replaced?

When lifesaving equipment is replaced or when the deepwater port undergoes a repair, alteration, or modification that involves replacing or adding to the lifesaving equipment complement, the new lifesaving equipment must meet the requirements of this subpart.

§ 149.303 What survival craft and rescue boats may be used on a manned deepwater port?

(a) Each survival craft on a manned deepwater port must be one of the following:

(1) A lifeboat meeting the requirements of 149.306 to this subpart; or

(2) A liferaft meeting the requirements of 149.308 to this subpart.

(b) Each rescue boat on a manned deepwater port must be a rescue boat meeting the requirements of § 149.314 to this part.

§ 149.304 What type and how many survival craft and rescue boats must a manned deepwater port have?

(a) Except as specified under § 149.305 to this subpart, each manned deepwater port must have at least the type and number of survival craft and the number of rescue boats indicated for the deepwater port in paragraphs (a)(1) through (a)(5) of this section.

(1) For a deepwater port with 30 or fewer persons onboard:

(i) One or more lifeboats with a total capacity of 100 percent of the personnel onboard;

(ii) One or more liferafts with a total capacity of 100 percent of the personnel onboard; and

(iii) One rescue boat, except that the rescue boat is not required for deepwater ports with 8 or fewer persons onboard.

(2) For a deepwater port with 31 or more persons onboard:

(i) At least two lifeboats with a total capacity of 100 percent of the personnel onboard;

(ii) One or more liferafts with a total capacity so that, if the survival craft at any one location are rendered unusable, there will be craft remaining with 100 percent capacity; and

(iii) One rescue boat.

(3) Lifeboats may be substituted for liferafts.

(4) Capacity refers to the total number of persons on the deepwater port at any one time, not including temporary personnel. Temporary personnel include: contract workers, official visitors, and any other persons who are not permanent employees. See § 149.305 in this subpart for additional survival craft requirements when temporary personnel are onboard.

(5) The required lifeboats may be used as rescue boats if the lifeboats also meet the requirements for rescue boats in § 149.314 to this subpart.

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(b) Deepwater ports consisting of novel structures or a combination of fixed and/or floating structures may require additional survival craft as deemed necessary by Commandant (G-M). In these cases, the type and number of survival craft must be specified in the operations manual.

§ 149.305 What are the survival craft requirements for temporary personnel?

(a) When temporary personnel are onboard a manned deepwater port and the complement exceeds the capacity of the survival craft required under 149.304 to this subpart, the port must have additional liferafts to ensure that the total capacity of the survival craft is not less than 200 percent of the personnel on board at any time.

(b) The liferafts required in paragraph (a) of this section need not meet the launching requirements of paragraph (b) to § 149.308 of this subpart, but must comply with the stowage requirements of 46 CFR 108.530(c).

§ 149.306 What are the requirements for lifeboats?

(a) Lifeboats must be:

(1) Totally enclosed and Coast Guard-approved fire-protected lifeboats; and
(2) If the hull or canopy is of aluminum, it must be protected in its stowage position by a water-spray system meeting 46 CFR 34.25.

(b) Each lifeboat must have at least the provisions and survival equipment required by 46 CFR 108.575(b).

(c) Except for boathooks, the equipment under paragraph (b) of this section must be securely stowed in the lifeboat.

(d) Each lifeboat must have a list of the equipment it is required to carry under paragraph (c) of this section. The list must be posted in the lifeboat.

(e) The manufacturer's instructions for maintenance and repair of the lifeboat, required under paragraph (a) to § 150.502 of this chapter, must be in the lifeboat or on a deepwater port.

§ 149.307 What are the requirements for free-fall lifeboats?

All free-fall lifeboats must be approved under approval series 46 CFR 160.135.

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§ 149.308 What are the requirements for liferafts?

(a) All liferafts must be an inflatable liferaft—approved under approval series 46 CFR 160.151, or a rigid liferaft—approved under approval series 46 CFR 160.118.

(b) Except as under paragraph (b) to 149.305 of this subpart, each inflatable or rigid liferaft, boarded from a deck that is more than 14 feet 9 inches above the water, must be davit launched or served by a marine evacuation system complying with 149.309 to this subpart.

§ 149.309 What are the requirements for marine evacuation systems?

All marine evacuation systems must be Coast Guard-approved, and comply with the launching arrangement requirements for MODU in 46 CFR 108.545.

§ 149.310 What are the muster and embarkation requirements for survival craft?

Muster and embarkation arrangements for survival craft must comply with 46 CFR 108.540.

§ 149.311 What are the launching and recovery requirements for lifeboats?

(a) Each lifeboat launched by falls, must have a launching and recovery system that complies with 46 CFR 108.555.

(b) Each free-fall lifeboat must have a launching and recovery system that complies with 46 CFR 108.557.

§ 149.312 What are the launching equipment requirements for inflatable liferafts?

(a) Each inflatable liferaft, not intended for davit launching, must be capable of rapid deployment.

(b) Each davit-launchable liferaft must have the following launching equipment at each launching station:

(1) A launching device approved under approval series 46 CFR 160.163; and

(2) A mechanical disengaging apparatus approved under the approval series 46 CFR 160.170.

(c) The launching equipment must be operative, both from the liferaft and from the deepwater port.

(d) Winch controls must be located so that the operator can observe the life-raft launching.

(e) The launching equipment must be arranged so that a loaded liferaft does not have to be lifted before it is lowered.

(f) Not more than two liferafts may be launched from the same set of launching equipment.

§ 149.313 How must survival craft be arranged?

The operator must arrange survival craft so that they meet the requirements of 46 CFR 108.525 (a) and 108.530 and:

(a) Are readily accessible in an emergency;

(b) Are accessible for inspection, maintenance, and testing;

(c) Are in locations clear of overboard discharge piping (or openings) and obstructions below; and

(d) Have the aggregate capacity to accommodate the total number of persons authorized to be berthed and are located so as to provide ready access to the personnel berthing area.

§ 149.314 What are the approval and stowage requirements for rescue boats?

(a) Rescue boats must be approved under approval series 46 CFR 160.156. A lifeboat is acceptable as a rescue boat if it also meets the requirements for a rescue boat under approval series 46 CFR 160.156.

(b) The stowage of rescue boats must comply with 46 CFR 108.565.

§ 149.315 What embarkation, launching, and recovery arrangements must rescue boats meet?

(a) Each rescue boat must be capable of being launched in a current of up to 5 knots. A painter may be used to meet this requirement.

(b) Each rescue boat embarkation and launching arrangement must permit the rescue boat to be boarded and launched in the shortest possible time.

(c) If the rescue boat is one of the deepwater port's survival craft, the rescue boat must comply with the muster and embarkation arrangement requirements of 149.310.

(d) The rescue boat must comply with the embarkation arrangement requirements of 46 CFR 108.555.

(e) If the launching arrangement uses a single fall, the rescue boat may have an automatic disengaging apparatus, approved under approval series 46 CFR 160.170, instead of a lifeboat release mechanism.

(f) The rescue boat must be capable of being recovered rapidly when loaded with its full complement of persons and equipment. If a lifeboat is being used as a rescue boat, rapid recovery must be possible when loaded with its lifeboat equipment and a rescue boat's complement of at least six persons.

(g) Each rescue boat-launching appliance must be fitted with a powered winch motor.

(h) Each rescue boat-launching appliance must be capable of hoisting the rescue boat, when loaded with a rescue boat's full complement of persons and equipment, at a rate of not less than 59 feet per minute.

(i) The operator may use an onboard crane to launch a rescue boat if the crane's launching system meets the requirements of this section.

§ 149.316 What are the requirements for lifejackets?

(a) Each lifejacket must be approved under approval series 46 CFR 160.002, 160.005, 160.055, 160.077, or 160.176.

(b) Each lifejacket must have a lifejacket light—approved under approval series 46 CFR 161.012. Each light must be securely attached to the front shoulder area of the lifejacket.

(c) Each lifejacket must have a whistle permanently attached to the lifejacket by a cord.

(d) Each lifejacket must be marked with Type I retro-reflective material—approved under approval series 46 CFR 164.018.

§ 149.317 How and where must lifejackets be stowed?

(a) The operator must ensure that lifejackets are stowed, in readily accessible places, in, or adjacent to, accommodation spaces.

(b) Lifejacket stowage containers, and the spaces housing the containers, must not be capable of being locked.

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(c) The operator must mark each lifejacket container, or lifejacket stowage location, with the words “LIFE-JACKETS” in block letters and the quantity, identity, and size of the lifejackets stowed inside the containers or stowed at the location.

§ 149.318 Must every person on the port have a lifejacket?

The operator must provide a lifejacket that complies with 149.316 to this subpart, for each person on a manned deepwater port.

§ 149.319 What additional lifejackets must I have?

For each person on duty in a location where the lifejacket required by 149.317 of this subpart is not readily accessible, an additional lifejacket must be stowed so as to be readily accessible to that location.

§ 149.320 What are the requirements for ring lifebuoys?

(a) Ring lifebuoys must be approved under approval series 46 CFR 160.050 or 160.150 (for SOLAS-approved equipment).

(b) Each ring lifebuoy must have a floating, electric water light—approved under approval series 46 CFR 161.010. The operator must ensure that the light to the ring lifebuoy is attached by a lanyard of 12-thread manila, or a synthetic rope of equivalent strength, not less than 3 feet nor more than 6 feet in length. The light must be mounted on a bracket near the ring lifebuoy so that, when the ring lifebuoy is cast loose, the light will be pulled free of the bracket.

(c) To each ring lifebuoy, there must be attached a buoyant line of 100 feet in length, with a breaking strength of at least 5 KiloNewtons force. The end of the line must not be secured to the deepwater port.

(d) Each ring lifebuoy must be marked with Type II retro-reflective material—approved under approval series 46 CFR 164.018.

§ 149.321 How many ring lifebuoys must be on each deepwater port?

There must be at least four approved ring lifebuoys on each manned deepwater port.

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§ 149.322 Where must ring lifebuoys be located and how must they be stowed?

(a) The operator must locate one ring lifebuoy on each side of the port and one near each external stairway leading to the water. One buoy may be used to satisfy both these requirements.

(b) Each ring lifebuoy must be stowed on or in a rack that is readily accessible in an emergency. The ring lifebuoy must not be permanently secured in any way to the rack or the deepwater port.

§ 149.323 What are the requirements for first aid kits?

(a) Each manned deepwater port must have an industrial first aid kit approved by an appropriate organization (e.g., American Red Cross) for the maximum number of persons on the deepwater port.

(b) The first aid kit must be maintained in a space designated as a medical treatment room or, if there is no medical treatment room, under the custody of the person in charge.

(c) The operator must ensure that each first aid kit is accompanied by a copy of DHHS Publication No. (PHS) 84-2024: “The Ship’s Medicine Chest and Medical Aid at Sea”—available from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402, or the “American Red Cross First Aid and Safety Handbook”—available from Little Brown and Company, 3 Center Plaza, Boston, MA 02018.

§ 149.324 What are the requirements for litters?

Each manned deepwater port must have at least one Stokes litter, or other suitable litter, capable of being safely hoisted with an injured person. The litter must be readily accessible in an emergency.

§ 149.325 What emergency communications equipment must be on a manned deepwater port?

Each manned deepwater port must have a radio, telephone, or other means of emergency communication with the shore, vessels, and facilities in the vicinity in the event the primary communications system outlined in

§149.140 fails. This communication equipment must have an emergency power source.

§ 149.326 What are the immersion suit requirements?

Each manned deepwater port, located North of 32 degrees North latitude, must comply with the immersion suit requirements in 46 CFR part 108.

§ 149.327 What are the approval requirements for work vests and anti-exposure suits?

All work vests and anti-exposure (deck) suits, on a manned deepwater port, must be of a buoyant type approved under:

- (a) Approval series 46 CFR 160.053 as a work vest;
- (b) Approval series 46 CFR 160.053 or 160.153 as an anti-exposure suit; or
- (c) Approval series 46 CFR 160.077 as a commercial hybrid personal flotation device.

§ 149.328 How must work vests and anti-exposure (deck) suits be stowed?

All work vests and deck suits must be stowed separately from lifejackets and in a location that is not easily confused with a storage area for lifejackets.

§ 149.329 How must work vests and deck suits be marked?

All work vests and deck suits must be marked with Type II retro-reflective material—approved under approval series 46 CFR 164.018.

§ 149.330 When may a work vest or deck suit be substituted for a lifejacket?

(a) A work vest or deck suit meeting § 149.326 of this subpart may be used instead of a lifejacket, when personnel are working near or over water.

(b) Work vests or deck suits may not be substituted for any portion of the number of approved lifejackets required to be on the deepwater port or an attending vessel for use during drills and emergencies.

§ 149.331 What are the requirements for hybrid personal flotation devices?

(a) The operator must ensure use and stowage of all commercial hybrid personal flotation devices (PFDs) used as work vests under:

(1) The procedures in the manual required for these devices in 46 CFR 160.077-29; and

(2) All limitations, if any, marked on them.

(b) All commercial hybrid PFDs on the deepwater port must be of the same or similar design and must have the same method of operation.

§ 149.332 What are the requirements for inflatable lifejackets?

(a) Each inflatable lifejacket must be approved under approval series 46 CFR 160.176.

(b) All inflatable lifejackets on a deepwater port must:

(1) Be used and stowed under the procedures in the manual required for these lifejackets under 46 CFR 160.176-21;

(2) Be marked with all limitations, if any; and

(3) Be of the same or similar design and must have the same method of operation.

§ 149.333 What are the marking requirements for lifesaving equipment?

(a) Each lifeboat, rigid liferaft, and survival capsule must be marked on two opposite outboard sides with the name, number, or other inscription identifying the deepwater port on which placed and the number of persons permitted on the craft. Each paddle or oar for these crafts must be marked with an inscription identifying the deepwater port. The letters and numbers must be at least 100 millimeters (3.94 inches) high on a contrasting background.

(b) Each inflatable liferaft must be marked to meet 46 CFR 160.151-33, and after each servicing, 46 CFR 160.151-57(m).

(c) All lifejackets and ring lifebuoys must be conspicuously marked with the name, number, or other inscription identifying the deepwater port on which placed. The letters and numbers

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must be at least 1.5 inches high on a contrasting background. Lifejackets and ring lifebuoys that accompany mobile crews to unmanned deepwater ports may be marked with the operator's name and field designation.

UNMANNED DEEPWATER PORT
REQUIREMENTS

§ 149.334 Who must ensure compliance with the requirements for unmanned deepwater ports?

The owner or operator of an unmanned deepwater port must ensure that applicable requirements are complied with on their deepwater port.

§ 149.335 When are people prohibited from being on a unmanned deepwater port?

No person may be on a unmanned deepwater port unless all requirements of this part are met.

§ 149.336 What are the requirements for lifejackets?

(a) Except as under paragraph (b) of this section, each unmanned deepwater port must have at least one lifejacket complying with 149.316 to this subpart, for each person on the deepwater port. The lifejackets need to be available for use on the port only when persons are onboard.

(b) During helicopter visits, personnel who have aircraft type lifejackets may use them as an alternative to the requirements of paragraph (a) of this section.

§ 149.337 What are the requirements for ring lifebuoys?

(a) Each unmanned deepwater port must have at least one ring lifebuoy complying with 149.320 to this subpart.

(b) If there is no space on the deepwater port for the ring lifebuoys, they must be on a manned vessel located alongside of the deepwater port while the persons are on the port.

§ 149.338 What are the requirements for immersion suits?

(a) Each unmanned deepwater port, located North of 32 degrees North latitude, must comply with the immersion suit requirements applicable to MODU under 46 CFR 108.580— approval series 46 CFR 160.171. Except as under para-

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graph (b) of this section, the immersion suits need be on the deepwater port only when persons are onboard.

(b) If an attending vessel is moored to the unmanned deepwater port, the suits may be stowed on the vessel, instead of on the deepwater port.

§ 149.339 What is the requirement for a previously approved lifesaving equipment on a deepwater port?

Lifesaving equipment (e.g., lifeboats, life rafts, PFDs) on a deepwater port on January 1, 2004, need not meet the requirements in this subpart until the equipment needs replacing, provided it is periodically tested and maintained in good operational condition.

§ 149.340 What are the requirements for lifesaving equipment that is not required by this subchapter?

Each item of lifesaving equipment on a deepwater port that is not required by this subchapter must be approved by the Commandant (G-M).

Subpart D—Firefighting and Fire-Protection Equipment

§ 149.400 What does this subpart apply to?

This subpart applies to all deepwater ports with the exception of a unmanned port consisting of a submerged turret loading (STL) or comparable configuration in which cargo transfer operations are conducted solely aboard the tank vessel by the vessel crew.

§ 149.401 What are the general requirements for firefighting and fire-protection equipment?

Each deepwater port must comply with the requirements for firefighting and fire-protection equipment in this subpart.

§ 149.402 What equipment must be approved by the Coast Guard?

Except as permitted under 149.403, 149.415 (c) or (d), 149.421 (a), or 149.422, all required firefighting and fire-protection equipment on a deepwater port must be approved by the Commandant (G-MSE). Firefighting and fire-protection equipment that supplements required equipment must also be approved by the Commandant (G-MSE)

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unless approval by the OCMI is requested and granted pursuant to 149.403 of this subpart.

§ 149.403 Use of alternate firefighting, fire prevention equipment, or procedures.

(a) The operator may request the use of alternate equipment or procedures for those required in this subchapter.

(b) Upon request, the OCMI may allow the use of alternate equipment or procedures if they will:

(1) Accomplish the purposes for the requirement; and

(2) Provide a degree of safety equivalent to, or greater than, that provided by the requirement.

(c) The OCMI may require that the requesting party:

(1) Explain why applying the requirement would be unreasonable or impracticable; or

(2) Submit engineering calculations, tests, or other data to demonstrate how the requested alternative would comply with paragraph (b) of this section.

(d) The OCMI may determine, on a case-by-case basis, that Commandant (G-MSE) must approve the use of the alternate equipment or procedure.

FIREFIGHTING REQUIREMENTS

§ 149.404 Can I use firefighting equipment for which there is no Coast Guard standard?

A deepwater port may use firefighting equipment for which there is no Coast Guard standard, as excess equipment, if the equipment does not endanger the port or the persons aboard in any way. This equipment must be listed and labeled by a nation-

ally recognized testing laboratory and it must be maintained in good working condition.

§ 149.405 How are fire extinguishers classified?

(a) Portable and semi-portable extinguishers on a manned deepwater port must be classified using the Coast Guard's marine rating system of combination letter and number symbol. The letter indicates the type of fire that the extinguisher is designed to extinguish, and the number indicates the relative size of the extinguisher.

(b) The letter designations are as follows:

(1) "A" for fires in ordinary combustible materials where the quenching and cooling effects of quantities of water, or solutions containing large percentages of water, are of first importance;

(2) "B" for fires in flammable liquids, greases, or other thick flammable substances, where a blanketing effect is essential; and

(3) "C" for fires in electrical equipment where the use of a non-conducting extinguishing agent is of first importance.

(c) The number designations for size range from "I" for the smallest extinguisher to "V" for the largest. Sizes I and II are portable extinguishers. Sizes III, IV, and V are semi-portable extinguishers which must be fitted with suitable hose and nozzle or other practicable means so that all portions of the space concerned may be covered. Examples of size graduations for some of the typical portable and semi-portable extinguishers are set forth in table 149.405.

TABLE 149.405—PORTABLE AND SEMI-PORTABLE EXTINGUISHERS

Classification type-size	Foam liters (gallons)	Carbon dioxide kilograms (pounds)	Dry chemical kilograms (pounds)
A-II	9.5 (2.5)	2.25(5) ¹
B-II	9.5 (2.5)	6.7 (15)	4.5 (10)
C-II	6.7 (15)	4.5 (10)
B-IV	7.6 (20)	22.5 (50)	13.5 (30)
B-V	15.2 (40)	45 (100) ²	22.5 (50) ²

Notes:

¹ Must be specifically approved as a type "A," "B," or "C" extinguisher.

² For outside use, double the quantity of agent that must be carried.

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§ 149.406 What are the approval requirements for a fire extinguisher?

All portable and semi-portable fire extinguishers must be of an approved type under 46 CFR part 162, subparts 162.028 and 162.039, respectively.

§ 149.407 Must fire extinguishers be on the deepwater port at all times?

(a) On a manned deepwater port, the fire extinguishers required by 149.409 to this subpart must be on the deepwater port at all times.

(b) On an unmanned deepwater port, the fire extinguishers required by 149.409 to this part need be on the deep-

water port only when personnel are working on the deepwater port during cargo transfer operations or performing maintenance duties.

§ 149.408 What are the maintenance requirements for a fire extinguisher?

All fire extinguishers must be maintained in good working order and serviced annually in accordance with 46 CFR 107.235.

§ 149.409 How many fire extinguishers are needed?

Each particular location must have the number of fire extinguishers required by table 149.409.

TABLE 149.409—PORTABLE AND SEMI-PORTABLE EXTINGUISHERS, MINIMUM QUANTITY AND LOCATION

Space	Classification	Minimum quantity and location
(a) Safety Areas:		
(1) Communicating corridors	A-II	One in each main corridor or stairway not more than 150 feet apart.
(2) Radio room	C-II	One outside of or near each radio room exit.
(b) Accommodation Spaces: (1) Sleeping quarters.	A-II	One in each sleeping space for more than four persons.
(c) Service Spaces:		
(1) Galleys	B-II or CII	One for each 2,500 square feet or fraction thereof for hazards involved.
(2) Storerooms	A-II	One for each 2,500 square feet or fraction thereof located near each exit, either inside or outside of the space.
(3) Paint room	B-II	One outside each paint room exit.
(d) Machinery Spaces:		
(1) Gas-fired boilers	B-II OR C-II	Two.
(2) Gas-fired boilers	B-V	One. ¹
(3) Oil-fired boilers	B-II	Two.
(4) Oil-fired boilers	B-V	Two. ¹
(5) Internal combustion or gas turbine engines.	B-II	One for each engine. ²
(6) Electric motors and generators, both of the open type.	C-II	One for each two motors or generators. ³
(e) Helicopter Areas:		
(1) Helicopter landing decks	B-V	One at each access route.
(2) Helicopter fueling facility	B-V	One at each fuel transfer facility. ⁴

¹ Not required if a fixed system is installed.
² If the engine is installed on a weather deck or is open to the atmosphere at all times, one B-II may be used for every three engines.
³ Small electrical appliances, such as fans, are exempt.
⁴ Not required if a fixed foam system is installed in accordance with paragraph of this part.

§ 149.410 Where must a portable or semi-portable fire extinguisher be located?

All portable and semi-portable fire extinguishers under table 149.409 must be located in the open so as to be readily seen.

§ 149.411 What are the requirements for fireman's outfits?

(a) Each manned deepwater port with nine or more persons must have at least two fireman's outfits complying with 46 CFR 108.497.

(b) The person in charge of safety must ensure that:

(1) At least two people trained in the use of fireman's outfits are on the deepwater port at all times;

(2) Each fireman's outfit and its spare equipment are stowed together in a readily accessible container or locker; that no more than one outfit is stowed in the same container or locker and that the two containers or lockers are located in separate areas to ensure that at least one is available at all times in the event of a fire; and

(3) Fireman's outfits are not used for any purpose other than firefighting.

§ 149.412 How many fire axes are needed?

Each manned deepwater port must have at least two fire axes per 46 CFR 108.499.

§ 149.413 On a manned deepwater port, what spaces require a fixed fire-extinguishing system?

The manned deepwater port spaces or systems listed in paragraphs (a) through (c) of this section must be protected by an approved fixed-gaseous, or other approved fixed-type, extinguishing system.

(a) Paint lockers of capacity in excess of 200 cubic feet and similar spaces containing flammable liquids.

(b) Galley range or deep fat fryer.

(c) Each enclosed space containing internal combustion or gas turbine machinery, with an aggregate power of more than 1,000 B.H.P., and any associated fuel oil units, purifiers, valves, or manifolds.

§ 149.414 What are the requirements for a fire-detection and alarm system?

(a) All accommodation and service spaces, on a manned deepwater port, and all spaces or systems of a deepwater port that process, store, transfer, and re-gasify liquefied natural gas, must have an automatic fire-detection and alarm system. The system must either comply with 46 CFR 108.405 or be designed and installed in compliance with a national consensus standard, as that term is defined in 29 CFR 1910.2, for fire-detection and fire alarm systems, and that complies with standards set by a nationally recognized testing laboratory, as that term is defined in 29 CFR 1910.7, for such systems or hardware.

(b) Sleeping quarters must be fitted with smoke detectors that have local alarms and that may, or may not, be connected to the central alarm panel.

(c) Each fire-detection and fire alarm system must have a visual alarm and an audible alarm at a normally manned area.

(d) Each fire-detection and fire alarm system must be divided into zones to limit the area covered by a particular alarm signal.

§ 149.415 What are the requirements for a fire-main system on a manned deepwater port?

(a) Each pumping platform complex must have a fixed fire-main system. The system must either:

(1) Comply with 46 CFR 108.415 through 108.429; or

(2) Comply with a national consensus standard, as that term is defined in 29 CFR 1910.2, for such systems and hardware and comply with the standards set by a nationally recognized testing laboratory, as that term is defined in 29 CFR 1910.7, for such systems and hardware.

(b) If the fire-main system meets the requirements outlined in paragraph (a)(2) of this section, it must provide, at a minimum, protection to:

- (1) Accommodation spaces;
- (2) Accommodation modules;
- (3) Control spaces; and

(4) Other areas frequented by port personnel. The hose system must be capable of reaching all parts of these spaces without difficulty.

(c) The fire-main system, under paragraph (a)(2) of this section, may be part of a firewater system in accordance with 30 CFR 250.803.

(d) A fire-main system for a natural gas deepwater port must also comply with 33 CFR 127.607.

[USCG-1998-3884, 69 FR 746, Jan. 6, 2004; 69 FR 3836, Jan. 27, 2004]

§ 149.416 What are the requirements for fire pumps?

(a) Each manned deepwater port must have at least two independently driven fire pumps. Each pump must be able to simultaneously deliver two streams of water at a pitot tube pressure of at least 50 p.s.i./345 k.p.a (75

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p.s.i./520 k.p.a. for a natural gas deepwater port)—measured at the two most remote nozzles.

(b) Each fire pump must have:

(1) A relief valve on its discharge side that is set to relieve at 25 p.s.i./173 k.p.a in excess of the pressure necessary to meet the requirement in paragraph (a) of this section;

(2) A pressure gauge on its discharge side; and

(3) Its own sea connection.

(c) Fire pumps may only be connected to the fire-main system.

(d) The fire pumps required by paragraph (a) of this section must be located in separate spaces and the arrangement of pumps, sea connections, controls, and sources of power must be such as to ensure that a fire, in any one space, will not put all of the fire pumps out of service.

(e) The fire pumps must be capable of being started and stopped from outside the spaces in which they are located.

§ 149.417 What are the requirements for fire hydrants?

(a) Fire hydrants must comply with 46 CFR 108.423.

(b) A single length of fire hose, with an attached nozzle, must be connected to each fire hydrant at all times. If the hose is exposed to freezing weather, it may be removed from the location during freezing weather.

(c) Each fire hydrant must have a shutoff valve.

(d) Any equipment that is located in the same space as the fire hydrant must not impede access to the hydrant.

(e) Each fire hydrant must have at least one spanner wrench at the fire hydrant.

§ 149.418 What are the requirements for fire hoses and fire nozzles?

(a) Fire hoses must comply with 46 CFR 108.425 and be:

(1) Prominently marked in accordance with 46 CFR 97.37-15; and

(2) If in an exposed location, protected from freezing weather.

(b) Each fire hose and nozzle must comply with 46 CFR 108.425 or a national consensus standard, as that term is defined in 29 CFR 1910.2, for such hose and nozzle and the standards set by a nationally recognized testing

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laboratory, as that term is defined in 29 CFR 1910.7, for such hose.

§ 149.419 What are the requirements for a dry chemical fire-suppression system?

Each natural gas deepwater port must be equipped with a dry chemical system that meets the requirements of § 127.609 to this chapter.

§ 149.420 What firefighting equipment must a helicopter landing deck on a manned deepwater port have?

Each helicopter landing deck on a manned deepwater port must have the following:

(a) A fire hydrant and hose located near each stairway access to the landing deck. If the landing deck has more than two stairway accesses, only two stairway accesses need to have a fire hydrant and hose. The fire hydrants must be part of the fire-main system; and

(b) Portable fire extinguishers in the quantity and location as required in table 149.409.

§ 149.421 What fire-protection system must a helicopter fueling facility have?

In addition to the portable fire extinguishers required under table 149.409, each helicopter fueling facility must have a fire-protection system complying with 46 CFR 108.489.

§ 149.422 Can the water supply for the helicopter deck fire-protection system be part of a firewater system?

(a) The water supply for the helicopter deck fire-protection system required under §§ 149.420 or 149.421 may be part of:

(1) The firewater system (installed in accordance with MMS regulations under 30 CFR 250.803); or

(2) The fire-main system under § 149.415.

(b) If the water supply for the helicopter deck fire-protection system is part of an independent accommodation fire-main system, the piping design and hardware must be compatible with the system and must comply with the requirements for fire-mains in 46 CFR 108.415 through 108.429.

§ 149.423 What are the fire-protection requirements for escape routes?

At least one escape route from an accommodation space or module to a survival craft or other means of evacuation, must provide adequate protection, in accordance with 46 CFR 108.133, for escaping personnel from fires and explosions. Additional requirements for escape routes are in subpart F of this part.

§ 149.424 What is the requirement for a previously approved fire-detection and alarm system on a deepwater port?

An existing fire-detection and alarm system on a deepwater port need not meet the requirements in this subpart until the system needs replacing, provided it is periodically tested and maintained in good operational condition.

Subpart E—Aids to Navigation

GENERAL

§ 149.500 What does this subpart do?

This subpart provides requirements for aids to navigation on deepwater ports.

§ 149.505 What are the general requirements for aids to navigation?

The following requirements apply to aids to navigation under this subpart:

- (a) Section 66.01-5 of this chapter on application to establish, maintain, discontinue, change, or transfer ownership of an aid, except as under 149.510;
- (b) Section 66.01-25(a) and (c) of this chapter on discontinuing or removing an aid. For the purposes of § 66.01-25(a) and (c) of this chapter, aids to navigation at a deepwater port are considered Class I aids under § 66.01-15 of this chapter;
- (c) Section 66.01-50 of this chapter on protection of an aid from interference and obstruction; and
- (d) Section 66.01-55 of this chapter on transfer of ownership of an aid.

§ 149.510 Permission to establish an aid to navigation.

- (a) To establish an aid to navigation on a deepwater port, the licensee must submit an application under § 66.01-5 of

this chapter, except the application must be sent to the Commandant (G-M).

- (b) At least 180 days before the installation of any structure at the site of a deepwater port, the licensee must submit an application for obstruction lights and other private aids to navigation for the particular construction site.

- (c) At least 180 days before beginning cargo transfer operations or changing the mooring facilities at the deepwater port, the licensee must submit an application for private aids to navigation.

LIGHTS

§ 149.520 What are the general lighting requirements?

All deepwater ports must meet the general requirements for obstruction lights in part 67 of this chapter.

LIGHTS ON PLATFORMS

§ 149.535 What are the requirements for rotating beacons on platforms?

In addition to obstruction lights, the tallest platform of a deepwater port must have a rotating lighted beacon that distinguishes the deepwater port from other surrounding offshore structures. The beacon must:

- (a) Have an effective intensity of at least 15,000 candela;
- (b) Flash at least once every 20 seconds;
- (c) Provide a white light signal;
- (d) Operate in wind speeds up to 100 knots at a rotation rate that is within 6 percent of the operating speed displayed on the beacon;
- (e) Have one or more leveling indicators permanently attached to the light, each with an accuracy of 0.25, or better; and
- (f) Be located:
 - (1) At least 60 feet above mean high water;
 - (2) Where the structure of the platform, or equipment mounted on the platform, does not obstruct the light in any direction; and
 - (3) So that it is visible all around the horizon.

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LIGHTS ON SINGLE POINT MOORINGS
(SPM)

§ 149.540 What are the requirements for obstruction lights on an SPM?

(a) The lights for a single point mooring (SPM) must meet the requirements for obstruction lights in part 67 of this chapter, except that the lights must be located at least 10 feet above mean high water.

(b) A submerged turret loading (STL) deepwater port is not required to meet the requirements for obstruction lights, provided it maintains at least a five-foot clearance beneath the net under-keel clearance for all vessels, at the mean low water condition, transiting the area.

(c) An STL deepwater port that utilizes a marker buoy must be lighted in accordance with paragraph (a) of this section.

LIGHTS ON FLOATING HOSE STRINGS

§ 149.550 What are the requirements for lights on a floating hose string?

Hose strings that are floating or supported on trestles shall display the following lights at night and in periods of restricted visibility.

(a) One row of yellow lights. The lights must be:

- (1) Flashing 50 to 70 times per minute;
- (2) Visible all around the horizon;
- (3) Visible for at least 2 miles on a clear, dark night;
- (4) Not less than 1 and not more than 3.5 meters above the water;
- (5) Approximately equally spaced; and
- (6) Not more than 10 meters apart where the hose string crosses a navigable channel, and, also, where the hose string does not cross a navigable channel, the lights must be sufficient in number to clearly show the hose string's length and course.

(b) Two red lights at each end of the hose string, including the ends in a channel where the hose string is separated to allow vessels to pass, whether open or closed. The lights must be:

- (1) Visible all around the horizon;
- (2) Visible for at least 2 miles on a clear, dark night; and
- (3) One meter apart in a vertical line with the lower light at the same height

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above the water as the flashing yellow light.

LIGHTS ON BUOYS USED TO DEFINE
TRAFFIC LANES

§ 149.560 How must buoys used to define traffic lanes be marked and lighted?

(a) Each buoy that is used to define the lateral boundaries of a traffic lane at a deepwater port must meet 62.25 of this chapter.

(b) The buoy must have an omnidirectional light located at least 8 feet above the water.

(c) The buoy light must be located so that the structure of the buoy, or any other device mounted on the buoy, does not obstruct the light in any direction.

§ 149.565 What are the required characteristics and intensity of lights on buoys used to define traffic lanes?

(a) The color of the light on a buoy that is used to define the lateral boundaries of a traffic lane must correspond with the color schemes for buoys in § 62.25 of this chapter.

(b) The buoy light may be fixed or flashing. If it is flashing, it must flash at intervals of not more than 6 seconds.

(c) Buoy lights must have an effective intensity of at least 25 candela.

MISCELLANEOUS

§ 149.570 How is a platform, SPM, or STL identified?

(a) Each platform, SPM, or STL (protruding above the water/marked by a buoy) must display the name of the deepwater port and the name or number identifying the structure, so that the information is visible:

(1) From the water at all angles of approach to the structure; and

(2) If the structure is equipped with a helicopter pad, from aircraft on approach to the structure.

(b) The information required in paragraph (a) of this section must be displayed in numbers and letters that are:

- (1) At least 12 inches high;
- (2) In vertical block style; and
- (3) Displayed against a contrasting background.

(c) If a STL protrudes from the water, it must be properly illuminated in accordance with § 149.540.

§ 149.575 How must objects protruding from the water, other than platforms and SPMs, be marked?

(a) Each object protruding from the water that is within 100 yards of a platform or SPM must be marked with white reflective tape.

(b) Each object protruding from the water that is more than 100 yards from a platform or SPM must meet the obstruction lighting requirements in this subpart for a platform.

§ 149.580 What are the requirements for a radar beacon?

(a) A radar beacon must be located on the tallest platform of a pumping platform complex or other fixed structure of the deepwater port.

(b) The beacon must meet the following:

(1) Be an FCC-type-accepted radar beacon (RACON);

(2) Transmit:

(i) In both the 2900–3100 MHz and 9300–9500 MHz frequency bands; or

(ii) If installed before July 8, 1991, in the 9320–9500 MHz frequency band;

(3) Transmit a signal of at least 250 milliwatts radiated power that is omnidirectional and polarized in the horizontal plane;

(4) Transmit a two or more element Morse code character, the length of which does not exceed 25 percent of the radar range expected to be used by vessels operating in the area;

(5) If of the frequency agile type, be programmed so that it will respond, at least 40 percent of the time, but not more than 90 percent of the time, with a response time duration of at least 24 seconds; and

(6) Be located at a minimum height of 15 feet above the highest deck of the platform and where the structure of the platform, or equipment mounted on the platform, does not obstruct the signal propagation in any direction.

§ 149.585 What are the requirements for sound signals?

(a) Each pumping platform complex must have a sound signal, approved under subpart 67.10 of this chapter, that has a 2-mile (3-kilometer) range. A list of Coast Guard approved sound signals is available from any District Commander.

(b) Each sound signal must be:

(1) Located at least 10 feet but not more than 150 feet above mean high water; and

(2) Located where the structure of the platform, or equipment mounted on it, does not obstruct the sound of the signal in any direction.

Subpart F—Design and Equipment

GENERAL

§ 149.600 What does this subpart do?

This subpart provides general requirements for equipment and design on deepwater ports.

§ 149.610 What must the District Commander be notified of and when?

The District Commander must be notified of the following:

When—	The District Commander must be notified—
(a) Construction of a pipeline, platform, or SPM is planned.	At least 30 days before construction begins.
(b) Construction of a pipeline, platform, or SPM begins.	Within 24 hours, from the date construction begins, that the lights and sound signals are in use at the construction site.
(c) A light or sound signal is changed during construction.	Within 24 hours of the change.
(d) Lights or sound signals used during construction of a platform, buoy, or SPM are replaced by permanent fixtures to meet the requirements of this part.	Within 24 hours of the replacement.
(e) The first cargo transfer operation begins.	At least 60 days before the operation.

§ 149.615 What construction drawings and specifications are required?

(a) To show compliance with the Act and this subchapter, the licensee must submit to the Commandant (G–M) three copies of:

(1) Each construction drawing and specification; and

(2) Each revision to a drawing and specification.

(b) Each drawing, specification, and revision under paragraph (a) of this section must bear the seal, or a facsimile imprint of the seal, of the registered professional engineer responsible for the accuracy and adequacy of the material.

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§ 149.620 What happens when the Commandant (G-M) reviews and evaluates the construction drawings and specifications?

(a) The Commandant (G-M) may concurrently review and evaluate construction drawings and specifications with the Marine Safety Center and other federal agencies having technical expertise (such as RSPA and FERC) in order to ensure compliance with the Act and this subchapter.

(b) Construction may not begin until the drawings and specifications are approved by the Commandant (G-M).

(c) Once construction begins, the Coast Guard periodically inspects the construction site to ensure that the construction complies with the drawings and specifications approved under paragraph (b) of this section.

(d) When construction is complete, the licensee must submit two complete sets of as-built drawings and specifications to the Commandant (G-M).

§ 149.625 What are the design standards?

(a) Each component, except for hoses, mooring lines, and aids to navigation buoys, must be designed to withstand at least the combined wind, wave, and current forces of the most severe storm that can be expected to occur at the deepwater port in any 100-year period. Component design must be appropriate for the protection of human life on the port or on vessels calling on or servicing the port from death or serious injury, and to protect the environment.

(b) Heliports on floating deepwater ports must be designed in compliance with the regulations at 46 CFR part 108.

STRUCTURAL FIRE-PROTECTION

§ 149.640 What are the requirements for systems fire-protection?

Manned deepwater ports built after January 1, 2004 and manned deepwater ports that undergo major conversions must comply with the requirements for structural fire-protection outlined in this subpart.

§ 149.641 What are the requirements for structural fire-protection for deepwater ports in accommodation spaces and modules?

(a) Accommodations spaces and modules must be designed, located, and constructed so as to minimize the effects of flame, excess heat, or blast effects caused by fires and explosions; and to provide safe refuge from fires and explosions for personnel for the minimum time needed to evacuate the space.

(b) This requirement may be met by complying with the applicable portions of 46 CFR part 108, provided that:

(1) The exterior boundaries of superstructures and deckhouses enclosing these spaces and modules, including any overhanging deck that supports these spaces and modules, are constructed to the A-60 standard defined in 46 CFR 108.131(b)(2) for any portion that faces, and is within 100 feet of, the platform hydrocarbon source; and

(2) The ventilation system must have a means of shutting down the system and an alarm at a manned location that sounds when any hazardous or toxic substance enters the system.

(c) As an alternative to paragraph (b) of this section, the requirement imposed by this section may be met by complying with a national consensus standard, as that term is defined in 29 CFR 1910.2, for the structural fire-protection of accommodation spaces and modules, and that complies with the standards set by a nationally recognized testing laboratory, as that term is defined by 29 CFR 1910.7, for such protection, provided that:

(1) All such spaces and modules on manned ports are provided with automatic fire-detection and alarm systems. The alarm system must signal a normally manned area both visually and audibly, and be divided into zones to limit the area covered by a particular alarm signal;

(2) Sleeping quarters are fitted with smoke detectors that have local alarms that may, or may not, be connected with the central alarm panel; and

(3) Independent fire walls are constructed and installed so as to be of size and orientation sufficient to protect the exterior surfaces of the spaces or modules from extreme radiant heat

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flux levels and provide the A-60 standard defined in 46 CFR 108.131(b)(2).

SINGLE POINT MOORINGS

§ 149.650 What are the requirements for single point moorings and their attached hoses?

Each SPM and its attached hose must be designed appropriately for the protection of the environment and for durability under combined wind, wave, and current forces of the most severe storm that can be expected to occur at the port in any 100-year period. The appropriateness of a design may be shown by its compliance with standards generally used within the offshore industry that are at least equivalent, in protecting the environment, to the standards in use on January 1, 2003, by the American Bureau of Shipping or another recognized classification society.

HELICOPTER FUELING FACILITIES

§ 149.655 What are the requirements for helicopter fueling facilities?

Helicopter fueling facilities must comply with 46 CFR 108.489 or an equivalent standard.

EMERGENCY POWER

§ 149.660 What are the requirements for emergency power?

(a) Each pumping platform complex must have emergency power equipment to provide power to operate simultaneously all of the following for a continuous period of 18 hours:

- (1) Emergency lighting circuits;
- (2) Aids to navigation equipment;
- (3) Communications equipment;
- (4) Radar equipment;
- (5) Alarm systems;
- (6) Electrically operated fire pumps; and
- (7) Other electrical equipment identified as emergency equipment in the operations manual for the deepwater port.

(b) No emergency power generating equipment may be located in any enclosed space on a platform that contains oil or natural gas transfer pumping equipment or other power generating equipment.

GENERAL ALARM SYSTEM

§ 149.665 What are the requirements for a general alarm system?

Each pumping platform complex must have a general alarm system that meets the following:

- (a) Is capable of being activated manually by the use of alarm boxes;
- (b) Is audible in all parts of the pumping platform complex, except in areas of high ambient noise levels where hearing protection is required under § 150.613 of this chapter; and
- (c) Has a high intensity flashing light in areas where hearing protection is used.

§ 149.670 What are the requirements for marking a general alarm system?

Each of the following must be marked with the words "GENERAL ALARM" in yellow letters at least 1-inch high on a red background:

- (a) Each general alarm box; and
- (b) Each audio or visual device under § 149.665 for signaling the general alarm.

PUBLIC ADDRESS SYSTEM

§ 149.675 What are the requirements for the public address system?

Each pumping platform complex must have a public address system operable from two locations on the complex.

MEDICAL TREATMENT ROOMS

§ 149.680 What are the requirements for medical treatment rooms?

Each deepwater port with sleeping spaces for 12 or more persons, including persons in accommodation modules, must have a medical treatment room that has:

- (a) A sign at the entrance designating it as a medical treatment room;
- (b) An entrance that is wide enough and arranged to readily admit a person on a stretcher;
- (c) A single berth or examination table that is accessible from both sides; and
- (d) A washbasin located in the room.

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§ 149.685 May a medical treatment room be used for other purposes?

A medical treatment room may be used as a sleeping space if the room meets the requirements of this subpart for both medical treatment rooms and sleeping spaces. It may also be used as an office. However, when used for medical purposes, the room may not be used as a sleeping space or office.

MISCELLANEOUS

§ 149.690 What are the requirements for means of escape, personnel landings, guardrails, and similar devices and for noise limits?

Each deepwater port must comply with the requirements for means of escape, personnel landings, guardrails and similar devices, and noise limits as outlined in §§ 149.691 through 149.699.

MEANS OF ESCAPE

§ 149.691 What means of escape are required?

(a) Each deepwater port must have the primary and secondary means of escape complying with 46 CFR 108.151 for use in evacuating the port.

(b) A primary means of escape consists of a fixed stairway, or a fixed ladder, constructed of steel.

(c) A secondary means of escape consists of a marine evacuation system, a portable flexible ladder, a knotted manrope, or a similar device determined by the OCMI to provide an equivalent or better means of escape.

(d) Where a secondary means of escape is required, a primary means of escape may be substituted.

§ 149.692 Where must they be located?

(a) Each means of escape must be easily accessible to personnel for rapidly evacuating the deepwater port.

(b) When two or more means of escape are installed, at least two must be located as nearly diagonally opposite each other as practicable.

(c) The following spaces, with a floor area of 300 square feet or more, must have at least two exits as widely spaced as possible:

- (1) Each accommodation space; and
- (2) Each space that is used on a regular basis, such as a control room, machinery room, storeroom, or other

space where personnel could be trapped in an emergency.

(d) Structural appendages to the deepwater port that do not have living quarters, workshops, offices, or other manned spaces and that personnel do not occupy continuously (*i.e.*, pumping platform complex) must have at least one primary means of escape and, as determined necessary by the OCMI, one or more secondary means of escape.

(e) When personnel are on an unmanned deepwater port, the port must have, in addition to the one primary means of escape, either:

(1) Another primary means of escape; or

(2) One or more secondary means of escape for every 10 persons onboard at any one time—located in the work areas.

(f) Structural appendages to an unmanned deepwater port do not require a primary or a secondary means of escape, unless the OCMI determines that one or more are necessary.

(g) Each means of escape must extend from the deepwater port's uppermost working level, to each successively lower working level, and so on to the water surface.

PERSONNEL LANDINGS

§ 149.693 What are the requirements for personnel landings on manned deepwater ports?

(a) On manned deepwater ports, sufficient personnel landings must be provided to assure safe access and egress.

(b) The personnel landings must be provided with satisfactory illumination. The minimum is one foot candle of artificial illumination as measured at the landing floor and guards and rails.

GUARDRAILS AND SIMILAR DEVICES

§ 149.694 What are the requirements for catwalks, floors, and openings?

(a) The configuration and installation of catwalks, floors, and openings must comply with 143.110 of this chapter.

(b) This section does not apply to catwalks, floor or deck areas, and openings:

- (1) In areas not normally occupied by personnel; or

(2) On helicopter landing decks.

§ 149.695 What are the requirements for stairways?

Stairways must have at least two courses of rails. The top course must serve as a handrail and be at least 34 inches above the tread.

§ 149.696 What are the requirements for a helicopter landing deck safety net?

A helicopter landing deck safety net must comply with 46 CFR 108.235.

NOISE LIMITS

§ 149.697 What are the requirements for a noise level survey?

(a) A survey to determine the maximum noise level during normal operations must be conducted in each accommodation space, working space, or other space routinely used by personnel. The recognized methodology used to conduct the survey must be specified in the survey results. Survey results must be kept on the deepwater port or, for an unmanned deepwater port, in the owner's principal office.

(b) The noise level must be measured over 12 hours to derive a time-weighted-average (TWA) using a sound level meter and an A-weighted filter or equivalent device.

(c) If the noise level throughout a space is determined to exceed 85 db(A), then signs must be posted with the legend: "NOISE HAZARD—HEARING PROTECTORS REQUIRED." Signs must be posted at eye level—at each entrance to the space.

(d) If the noise level is determined to exceed 85 db(A) only in a portion of a space, the sign described in paragraph (c) of this section must be posted within that portion in a location visible from each direction of access.

(e) Working spaces and other areas routinely used by personnel, other than accommodation spaces, must be designed to limit the noise level in those areas so that personnel wearing hearing protectors may hear warning and emergency alarms. If this is not practicable and warning and emergency alarms cannot be heard, visual alarms in addition to the audible alarms must be installed.

PORTABLE LIGHTS

§ 149.700 What kind of portable lights may be used on a deepwater port?

Each portable light and its supply cord on a deepwater port must be designed for the environment where it is used.

PART 150—DEEPWATER PORTS: OPERATIONS

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