

**§ 26.30-5 Use.**

(a) Approved buoyant work vests are considered to be items of safety apparel and may be carried aboard vessels to be worn by crew members when working near or over the water under favorable working conditions.

(b) When carried, approved buoyant work vests shall not be accepted in lieu of any portion of the required number of approved lifesaving appliances required by §25.25-10 of this subchapter.

**§ 26.30-10 Stowage.**

(a) The approved buoyant work vests shall be stowed separately from the regular stowage of required lifesaving equipment.

**PART 27—TOWING VESSELS****Subpart A—General Provisions for Fire-Protection Measures and Fire-Suppression Equipment on Towing Vessels**

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SOURCE: USCG-2000-6931, 69 FR 34069, June 18, 2004, unless otherwise noted.

**Subpart A—General Provisions for Fire-Protection Measures and Fire-Suppression Equipment on Towing Vessels****§ 27.100 What towing vessels does this part affect?**

(a) You must comply with this part if your towing vessel operates on the navigable waters of the United States, unless your vessel is one exempt under paragraph (b) of this section.

(b) This part does not apply to you if your towing vessel is—

(1) Used solely for any of the following services or any combination of these services—

(i) Within a limited geographic area, such as a fleeting-area for barges or a commercial facility, and used for restricted service, such as making up or breaking up larger tows;

(ii) For harbor-assist;

(iii) For assistance towing as defined by 46 CFR 10.103;

(iv) For response to emergency or pollution;

(2) A public vessel that is both owned, or demise chartered, and operated by the United States Government or by a government of a foreign country; and that is not engaged in commercial service;

(3) A foreign vessel engaged in innocent passage; or

(4) Exempted by the Captain of the Port (COTP).

(c) If you think your towing vessel should be exempt from these requirements for a specified route, you should submit a written request to the appropriate COTP. The COTP will provide you with a written response granting or denying your request. The COTP will consider the extent to which unsafe conditions would result if your

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vessel lost propulsion because of a fire in the engine room.

(d) You must test and maintain all of the equipment required by this part in accordance with the attached name-plate or manufacturer's approved design manual.

§ 27.101 Definitions.

As used in this part—

Accommodation includes any:

- (1) Messroom.
- (2) Lounge.
- (3) Sitting area.
- (4) Recreation room.
- (5) Quarters.
- (6) Toilet space.
- (7) Shower room.
- (8) Galley.
- (9) Berthing facility.
- (10) Clothing-changing room.

Engine room means the enclosed area where any main-propulsion engine is located. It comprises all deck levels within that area.

Fixed fire-extinguishing system means:

- (1) A carbon-dioxide system that satisfies 46 CFR subpart 76.15 and is approved by the Commandant;
- (2) A manually-operated clean-agent system that satisfies the National Fire Protection Association (NFPA) Standard 2001 (incorporated by reference in § 27.102) and is approved by the Commandant; or
- (3) A manually-operated water-mist system that satisfies NFPA Standard 750 (incorporated by reference in § 27.102) and is approved by the Commandant.

Fleeting-area means a separate location where individual barges are moored or assembled to make a tow. The barges are not in transport, but are temporarily marshaled, waiting for pickup by different vessels that will transport them to various destinations. A fleeting-area is a limited geographic area.

Harbor-assist means docking and undocking ships.

Limited geographic area means a local area of operation, usually within a single harbor or port. The local Captain of the Port (COTP) determines the definition of local geographic area for each zone.

Operating station means the principal steering station on the vessel, from which the vessel is normally navigated.

Towing vessel means a commercial vessel engaged in, or intending to engage in, pulling, pushing, or hauling alongside, or any combination of pulling, pushing, or hauling alongside.

Towing vessel in inland service means a towing vessel that is not in ocean or coastal service.

Towing vessel in ocean or coastal service means a towing vessel that operates beyond the baseline of the U.S. territorial sea.

We means the United States Coast Guard.

Work space means any area on the vessel where the crew could be present while on duty and performing their assigned tasks.

You means the owner of a towing vessel, unless otherwise specified.

§ 27.102 Incorporation by reference.

(a) Certain material is incorporated by reference into this part with the approval of the Director of the Federal Register—in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. To enforce any edition other than that specified in paragraph (b) of this section, the Coast Guard must publish notice of the change in the FEDERAL REGISTER and make the material available for inspection. All approved material is available at the U.S. Coast Guard, Office of Design and Engineering Standards (G-MSE), 2100 Second Street SW., Washington, DC 20593-0001, or from the sources indicated in paragraph (b) of this section, or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: [http://www.archives.gov/federal\\_register/code\\_of\\_federal\\_regulations/ibr\\_locations.html](http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html).

(b) The material approved for incorporation by reference in this part and the sections affected are:

American Boat and Yacht Council (ABYC), 3069 Solomons Island Road, Edgewater, MD 21037-1416	
H-25-1986—Portable Fuel Systems for Flammable Liquids .....	27.211
H-33-1989—Diesel Fuel Systems .....	27.211

National Fire Protection Association (NFPA), 1 Batterymarch Park, Quincy, MA 02269-9101

- NFPA 302-1998—Fire Protection Standard for Pleasure, and Commercial Motorcraft 27.211
- NFPA 750—Standard on Water Mist Fire Protection Systems, 2003 edition ..... 27.101
- NFPA 2001—Standard on Clean Agent Fire Extinguishing Systems, 2000 edition ..... 27.101

Society of Automotive Engineers (SAE), 400 Commonwealth Drive, Warrendale, PA 15096-0001

- SAE J1475-1984—Hydraulic Hose Fitting for Marine Applications ..... 27.211
- SAE J1942-1989—Hose and Hose Assemblies for Marine Applications ..... 27.211

**Subpart B—Fire-Protection Measures for Towing Vessels**

**§ 27.201 What are the requirements for general alarms on towing vessels?**

(a) You must ensure that your vessel is fitted with a general alarm that:

- (1) Has a contact-maker at the operating station that can notify persons on board in the event of an emergency.
- (2) Is capable of notifying persons in any accommodation, work space, and the engine room.
- (3) Has installed, in the engine room and any other area where background noise makes a general alarm hard to hear, a supplemental flashing red light that is identified with a sign that reads:

Attention General Alarm—When Alarm Sounds or Flashes Go to Your Station.

- (4) Is tested at least once each week.
- (b) You or the operator may use a public-address (PA) system or other means of alerting all persons on your towing vessel instead of a general alarm, if the system—
  - (1) Is capable of notifying persons in any accommodation, work space, and the engine room;
  - (2) Is tested at least once each week;
  - (3) Can be activated from the operating station; and
  - (4) Complies with paragraph (a)(3) of this section.

**§ 27.203 What are the requirements for fire detection on towing vessels?**

You must have a fire-detection system installed on your vessel to detect engine-room fires. Any owner of a vessel whose construction was contracted for before January 18, 2000, may use an existing engine-room-monitoring system (with fire-detection capability) instead of a fire-detection system, if the monitoring system is operable and complies with this section. You must ensure that—

(a) Each detector, each control panel, and each fire alarm are approved under 46 CFR subpart 161.002 or listed by an independent testing laboratory; except that, if you use an existing engine-room-monitoring system (with fire-detection capability), each detector must be listed by an independent testing laboratory;

(b) The system is installed, tested, and maintained in line with the manufacturer’s design manual;

(c) The system is arranged and installed so a fire in the engine room automatically sets off alarms on a control panel at the operating station;

- (d) The control panel includes—
- (1) A power-available light;
  - (2) Both an audible alarm to notify crew at the operating station of fire and visible alarms to identify the zone or zones of origin of the fire;
  - (3) A means to silence the audible alarm while maintaining indication by the visible alarms;
  - (4) A circuit-fault detector test-switch; and
  - (5) Labels for all switches and indicator lights, identifying their functions;

(e) The system draws power from two sources, switchover from the primary source to the secondary source being either manual or automatic;

(f) The system serves no other purpose, unless it is an engine-room-monitoring system (with fire-detection capability) installed on a vessel whose construction was contracted for before January 18, 2000; and

(g) The system is certified by a Registered Professional Engineer, or by a recognized classification society (under 46 CFR part 8), to comply with paragraphs (a) through (f) of this section.

**§ 27.205 What are the requirements for internal communication systems on towing vessels?**

(a) You must ensure that your vessel is fitted with a communication system between the engine room and the operating station that—

(1) Consists of either fixed or portable equipment, such as a sound-powered telephone, portable radios, or other reliable method of voice communication, with a main or reserve power supply that is independent of the electrical system on your towing vessel; and

(2) Provides two-way voice communication and calling between the operating station and either—

(i) The engine room; or

(ii) A location immediately adjacent to an exit from the engine room.

(b) Twin-screw vessels with operating-station control for both engines are not required to have internal communication systems.

(c) When the operating-station's engine controls and the access to the engine room are within 3 meters (10 feet) of each other and allow unobstructed visual contact between them, direct voice communication is acceptable instead of a communication system.

**§ 27.207 What are the requirements for fuel shut-offs on towing vessels?**

To stop the flow of fuel in the event of a break in the fuel line, you must have a positive, remote fuel-shut-off valve fitted on any fuel line that supplies fuel directly to an engine or generator. The valve must be near the source of supply (for instance, at the day tank, storage tank, or fuel-distribution manifold). Furthermore, it must be operable from a safe place outside the space where the valve is installed. Each remote valve control should be marked in clearly legible letters, at least 25 millimeters (1 inch) high, indicating the purpose of the valve and the way to operate it.

**§ 27.209 What are the requirements for training crews to respond to fires?**

(a) *Drills and instruction.* The master or person in charge of a vessel must ensure that each crewmember participates in drills and receives instruction at least once each month. The instruction may coincide with the drills, but

need not. You must ensure that all crewmembers are familiar with their fire-fighting duties, and, specifically, with the following contingencies:

(1) Fighting a fire in the engine room and elsewhere on board the vessel, including how to—

(i) Operate all of the fire-extinguishing equipment on board the vessel;

(ii) Stop any mechanical ventilation system for the engine room and effectively seal all natural openings to the space to prevent leakage of the extinguishing agent; and

(iii) Operate the fuel shut-off for the engine room.

(2) Activating the general alarm.

(3) Reporting inoperative alarm systems and fire-detection systems.

(4) Putting on a fireman's outfit and a self-contained breathing apparatus, if the vessel is so equipped.

(b) *Alternative form of instruction.* The master or person in charge of a vessel may substitute, for the instruction required in paragraph (a) of this section, the viewing of video training materials concerning at least the contingencies listed in paragraph (a), followed by a discussion led by someone familiar with these contingencies. This instruction may occur either on board or off the vessel.

(c) *Participation in drills.* Drills must take place on board the vessel, as if there were an actual emergency. They must include—

(1) Participation by all crewmembers;

(2) Breaking out and using, or simulating the use of, emergency equipment;

(3) Testing of all alarm and detection systems; and

(4) Putting on protective clothing (by at least one person), if the vessel is so equipped.

(d) *Safety orientation.* The master or person in charge of a vessel must ensure that each crewmember who has not (i) participated in the drills required by paragraph (a) of this section, and (ii) received the instruction required by that paragraph, receives a safety orientation within 24 hours of reporting for duty.

(e) The safety orientation must cover the particular contingencies listed in paragraph (a) of this section.

**§ 27.211 What are the specifications for fuel systems on towing vessels whose construction was contracted for on or after January 18, 2000?**

(a) You must ensure that, except for the components of an outboard engine or of a portable bilge pump or fire pump, each fuel system installed on board the vessel complies with this section.

(b) *Portable fuel systems.* The vessel must not incorporate or carry portable fuel systems, including portable tanks and related fuel lines and accessories, except when used for outboard engines or when permanently attached to portable equipment such as portable bilge pumps or fire pumps. The design, construction, and stowage of portable tanks and related fuel lines and accessories must comply with ABYC H-25 (incorporated by reference in § 27.102).

(c) *Fuel restrictions.* Neither you nor the master or person in charge may use fuel other than bunker C or diesel, except for outboard engines, or where otherwise accepted by the Commandant (G-MSE). An installation that uses bunker C, heavy fuel oil (HFO), or any fuel that requires pre-heating, must comply with subchapter F of this chapter.

(d) *Vent pipes for integral fuel tanks.* Each integral fuel tank must meet the requirements of this paragraph as follows:

(1) Each tank must have a vent that connects to the highest point of the tank, discharges on a weather deck through a bend of 180 degrees (3.14 radians), and is fitted with a 30-by-30-mesh corrosion-resistant flame screen. Vents from two or more tanks may combine in a system that discharges on a weather deck.

(2) The net cross-sectional area of the vent pipe for the tank must be—

(i) Not less than 312.3 square millimeters (0.484 square inches) for any tank filled by gravity; or

(ii) Not less than that of the fill pipe for any tank filled under pressure.

(e) *Fuel piping.* Except as permitted in paragraphs (e)(1), (2), and (3) of this section, each fuel line must be seam-

less and made of steel, annealed copper, nickel-copper, or copper-nickel. Each fuel line must have a wall thickness of not less than 0.9 millimeters (0.035 inch) except that—

(1) Aluminum piping is acceptable on an aluminum-hull vessel if it is installed outside the engine room and is at least Schedule 80 in thickness; and

(2) Nonmetallic flexible hose is acceptable if it—

(i) Is used in lengths of not more than 0.76 meters (30 inches);

(ii) Is visible and easily accessible;

(iii) Does not penetrate a watertight bulkhead;

(iv) Is fabricated with an inner tube and a cover of synthetic rubber or other suitable material reinforced with wire braid; and

(v) Either,—

(A) If it is designed for use with compression fittings, is fitted with suitable, corrosion-resistant, compression fittings, or fittings compliant with SAE J1475 (incorporated by reference in § 27.102); or,

(B) If it is designed for use with clamps, is installed with two clamps at each end of the hose. Clamps must not rely on spring tension and must be installed beyond the bead or flare or over the serrations of the mating spud, pipe, or hose fitting. Hose complying with SAE J1475 is also acceptable.

(3) Nonmetallic flexible hose complying with SAE J1942 (incorporated by reference in § 27.102) is also acceptable.

(f) A towing vessel of less than 24 meters (79 feet) in length may comply with any of the following standards for fuel systems rather than with those of paragraph (e) of this section:

(1) ABYC H-33 (incorporated by reference in § 27.102).

(2) Chapter 5 of NFPA 302 (incorporated by reference in § 27.102).

(3) 33 CFR chapter I, subchapter S (Boating Safety).

**Subpart C—Fire-Suppression Equipment for Towing Vessels**

**§ 27.301 What are the requirements for fire pumps, fire mains, and fire hoses on towing vessels?**

By April 29, 2005, you must provide for your towing vessel either a self-priming, power-driven, fixed fire-pump,

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a fire main, and hoses and nozzles in accordance with paragraphs (a) through (c) of this section; or a portable pump, and hoses and nozzles, in accordance with paragraphs (d) and (e) of this section.

(a) The fixed fire-pump must be capable of—

(1) Delivering water simultaneously from the two highest hydrants, or from both branches of the fitting if the highest hydrant has a Siamese fitting, at a pitot-tube pressure of at least 344 kPa (50 psi) and a flow rate of at least 300 lpm (80 gpm); and

(2) Being energized remotely from a safe place outside the engine room and from the pump.

(b) All valves necessary for the operation of the fire main must be kept in the open position or must be capable of operation from the same place where the remote fire pump control is located.

(c) The fire main must have a sufficient number of fire hydrants with attached hose to reach any part of the machinery space using a single length of fire hose.

(d) The hose must be lined commercial fire-hose, at least 40mm (1.5 inches) in diameter, 15 meters (50 feet) in length, and fitted with a nozzle made of corrosion-resistant material capable of providing a solid stream and a spray pattern.

(e) The portable fire pump must be self-priming and power-driven, with—

(1) A minimum capacity of at least 300 lpm (80 gpm) at a discharge gauge pressure of not less than 414 kPa (60 psi), measured at the pump discharge;

(2) A sufficient amount of lined commercial fire hose at least 40mm (1.5 inches) in diameter and 15 meters (50 feet) in length, immediately available to attach to it so that a stream of water will reach any part of the vessel; and

(3) A nozzle made of corrosion-resistant material capable of providing a solid stream and a spray pattern.

(f) You must stow the pump with its hose and nozzle outside of the machinery space.

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**§ 27.303 What are the requirements for fire-extinguishing equipment on towing vessels in inland service, and on towing vessels in ocean or coastal service whose construction was contracted for before August 27, 2003?**

You must carry on your towing vessel both—

(a) The minimum number of hand-portable fire extinguishers required by subpart 25.30 of this part; and

(b) By April 29, 2005, either—

(1) An approved B-V semi-portable fire-extinguishing system to protect the engine room; or

(2) A fixed fire-extinguishing system installed to protect the engine room of the vessel.

**§ 27.305 What are the requirements for fire-extinguishing equipment on towing vessels in ocean or coastal service whose construction was contracted for on or after August 27, 2003?**

(a) You must carry on your towing vessel both—

(1) The minimum number of hand-portable fire extinguishers required by subpart 25.30 of this part; and

(2) An approved B-V semi-portable fire-extinguishing system to protect the engine room.

(b) You must have a fixed fire-extinguishing system installed to protect the engine room of the vessel.

(c) This section does not apply to any towing vessel pushing a barge ahead, or hauling a barge alongside, when the barge's coastwise or Great Lakes route is restricted (as indicated on its certificate of inspection), so that the barge may operate "in fair weather only, within 12 miles of shore," or with words to that effect.

**PART 28—REQUIREMENTS FOR COMMERCIAL FISHING INDUSTRY VESSELS**

**Subpart A—General Provisions**

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- 28.65 Termination of unsafe operations.