

## § 161.011-1

(5) A statement by the manufacturer certifying that the waterlight complies with the requirements of this subpart.

[CGD 85-208, 54 FR 27020, June 27, 1989, as amended by CGD 95-072, 60 FR 50467, Sept. 29, 1995; CGD 96-041, 61 FR 50734, Sept. 27, 1996; USCG 2001-10224, 66 FR 48620, Sept. 21, 2001; USCG-2007-29018, 72 FR 53967, Sept. 21, 2007; USCG-2013-0671, 78 FR 60160, Sept. 30, 2013]

### Subpart 161.011—Emergency Position Indicating Radiobeacons

#### § 161.011-1 Purpose.

This subpart prescribes approval requirements for emergency position indicating radiobeacons (EPIRB).

[39 FR 10139, Mar. 18, 1974]

#### § 161.011-5 Classes.

EPIRB's are classed as follows:

(a) Class A—an EPIRB that has been type approved or type accepted by the FCC as a Class A EPIRB. These EPIRB's are capable of floating free of a vessel and activating automatically if the vessel sinks.

(b) Class C—An EPIRB that has been type approved or type accepted by the FCC as a Class C EPIRB. These EPIRB's are manually activated and are not required to be Coast Guard approved.

[39 FR 10139, Mar. 18, 1974, as amended by CGD 80-024, 49 FR 40409, Oct. 16, 1984]

#### § 161.011-10 EPIRB approval.

(a) The Coast Guard approves the class of EPIRB's listed in § 161.011-5(a) of this subpart.

(b) An application for type approval or type acceptance of an EPIRB should be submitted to the FCC in accordance with Title 47 of the Code of Federal Regulations, Part 2. When requested by the FCC, the Coast Guard reviews the test results in the application that concern installation and automatic operation (if required) of the EPIRB. The Coast Guard provides the results of the review to the manufacturer, and to the FCC for its use in acting upon the application.

(c) Upon notification of the FCC type acceptance or type approval, the Com-

## 46 CFR Ch. I (10-1-14 Edition)

mandant (CG-ENG) issues a certificate of approval for the EPIRB.

[CGD 80-024, 49 FR 40409, Oct. 16, 1984, as amended by CGD 95-072, 60 FR 50467, Sept. 29, 1995; CGD 96-041, 61 FR 50734, Sept. 27, 1996]

### Subpart 161.012—Personal Flotation Device Lights

SOURCE: CGD 76-028, 44 FR 38785, July 2, 1979, unless otherwise noted.

#### § 161.012-1 Scope.

(a) This subpart prescribes construction and performance requirements, approval and production tests, and procedures for approving personal flotation device lights fitted on Coast Guard approved life preservers, buoyant vests, and other personal flotation devices.

(b) [Reserved]

[CGD 76-028, 44 FR 38785, July 2, 1979, as amended by USCG-2014-0688, 79 FR 58286, Sept. 29, 2014]

#### § 161.012-3 Definitions.

(a) As used in this subpart, *PF*D means Coast Guard approved personal flotation device.

(b) For the purpose of § 161.012-7, *storage life* means the amount of time after the date of manufacture of the power source of a light that the power source can be stored under typical marine environmental conditions on a vessel and still have sufficient power for the light to meet the requirements of § 161.012-9.

#### § 161.012-5 Approval procedures.

(a) An application for approval of a PFD light under this subpart must be sent to the Commandant (CG-ENG), Attn: Office of Design and Engineering Systems, U.S. Coast Guard Stop 7509, 2703 Martin Luther King Jr. Avenue, SE., Washington, DC 20593-7509.

(b) Each application for approval must contain—(1) The name and address of the applicant;

(2) Two copies of plans showing the construction details of the light;

(3) A detailed description of the applicant's production testing program; and

(4) A laboratory test report containing the observations and results of approval testing.

(c) The Commandant advises the applicant whether the light is approved. If the light is approved, an approval certificate is sent to the applicant.

[CGD 76-028, 44 FR 38785, July 2, 1979, as amended by CGD 88-070, 53 FR 34536, Sept. 7, 1988; CGD 95-072, 60 FR 50467, Sept. 29, 1995; CGD 96-041, 61 FR 50734, Sept. 27, 1996; USCG-2013-0671, 78 FR 60160, Sept. 30, 2013]

#### § 161.012-7 Construction.

(a) Each light must be designed to be attached to a PFD without damaging the PFD or interfering with its performance.

(b) Each light and its power source must be designed to be removed and replaced without causing damage to the PFD.

(c) The storage life of the power source of a light must be twice as long as the period between the date of manufacture and the expiration date of the power source.

(d) Each light, prior to activation, must be capable of preventing leakage from its container of any chemicals it contains or produces.

(e) Each component of a light must be designed to remain serviceable in a marine environment for at least as long as the storage life of the light's power source.

(f) No light may have a water pressure switch.

(g) Each light must be designed so that when attached to a PFD, its light beam, at a minimum, is visible in an arc of 180 degrees above or in front of the wearer.

(h) Each light, including its power source, must fit into a cylindrical space that is 150 mm (6 in.) long and 75 mm (3 in.) in diameter.

(i) Each light, including its power source, must not weigh more than 225g (8 oz.).

(j) Each light that is designed to operate while detached from a PFD must have a lanyard that can be used to connect it to the PFD. The lanyard must be at least 750 mm (30 in.) long.

(k) Each light designed to operate while detached from a PFD must be capable of floating in water with its light source at or above the surface of the water.

#### § 161.012-9 Performance.

(a) If a light is a flashing light, its flash rate when first activated, or within five minutes thereafter, must be between 50 and 70 flashes per minute.

(b) Each light must—(1) Begin to shine within 2 minutes after activation; and

(2) Within 5 minutes after activation be capable of being seen from a distance of at least one nautical mile on a dark clear night.

(c) Each light must be designed to operate underwater continuously for at least 8 hours at a water temperature of  $15^{\circ} \pm 5^{\circ} \text{C}$  ( $59^{\circ} \pm 9^{\circ} \text{F}$ ). However, if the light needs air to operate, underwater operation is required only for 50 or more seconds during each minute of the eight hour period.

(d) Each light must be designed to operate both in sea water and in fresh water.

(e) A light that concentrates its light beam by means of a lens or curved reflector must not be a flashing light.

(f) Each light must be designed to operate in accordance with this section after storage for 24 hours at a temperature of  $65^{\circ} \pm 2^{\circ} \text{C}$  ( $149^{\circ} \pm 44^{\circ} \text{F}$ ), and after storage for 24 hours at  $-30^{\circ} \pm 2^{\circ} \text{C}$  ( $-22^{\circ} \pm 4^{\circ} \text{F}$ ).

#### § 161.012-11 Approval tests.

(a) The approval tests described in this section must be conducted for each light submitted for Coast Guard approval. The tests must be conducted by a laboratory that has the equipment, personnel, and procedures necessary to conduct the approval tests required by this subpart, and that is free of influence and control of the applicant and other manufacturers, suppliers, and vendors of PFD lights.

(b) A sample light must be activated at night under clear atmospheric conditions. However, two lights must be used if the power source is water activated, and one light must be activated in fresh water and the other in salt water having the approximate salinity of sea water. The light, or lights, must begin to shine within 2 minutes after activation and, within 5 minutes after activation, must be seen from a distance of at least one nautical mile against a dark background.