#### § 111.79-11

be energized when not in the receptacle outlet must be female.

(b) If a receptacle outlet may be used as a source of power and as a receiver of power, such as the receptacles on barges that may have to supply power to adjoining barges in some makeup and receive power from the towboat or adjoining barge in other makeups, the receptacles must be male and reverse service. Plugs of flexible cable must be female and must be at both ends of the flexible lead. The female plug must meet §111.79–7.

### §111.79-11 Lifeboat receptacles.

Each receptacle outlet on a lifeboat for connection to a vessel's electrical system must allow the plug to pull free when the lifeboat is lowered.

## § 111.79-13 Different voltages and power types.

If receptacle outlets on a vessel are supplied by different voltages (e.g., 110 volts and 220 volts) or by different types of power (e.g., AC and DC), each receptacle outlet must preclude the plugging of a portable device into a receptacle outlet of an incompatible voltage or type of power.

[CGD 94-108, 61 FR 28283, June 4, 1996]

## § 111.79-15 Receptacles for refrigerated containers.

Receptacles for refrigerated containers must meet one of the following:

- (a) Each receptacle for refrigerated containers must have a switch interlocked in such a way that the receptacle's contacts are deenergized before the making or breaking of the connection between the plug and receptacle contacts.
- (b) Each group of receptacles for refrigerated containers must have:
- (1) A switch near the receptacles that disconnects all power to those receptacles; and
- (2) A sign stating that the switch should be opened before cables are disconnected from the receptacles or refrigerated containers.
- (c) Each receptacle for refrigerated containers must be designed for circuit breaking service.

# Subpart 111.81—Outlet Boxes and Junction Boxes

# §111.81-1 Outlet boxes and junction boxes; general.

- (a) The requirements of this subpart apply to each outlet box used with a lighting fixture, wiring device, or similar item, including each separately installed connection and junction box.
- (b) An outlet box must be at each outlet, switch, receptacle, or junction point.
- (c) Each outlet or junction box must have a cover unless a fixture canopy, switch cover, receptacle cover, or other cover is used.
- (d) Each outlet box and junction box installation must meet article 370 of the NEC, UL 50, UL 514 series, or IEC Series 92 Publications (e.g., IEC 92–306), as appropriate.
- (e) Each outlet or junction box must be securely attached to its mounting and be affixed so as to maintain its designated degree of protection.
- (f) Each outlet and junction box must be suitable for the environment in which it is installed and be constructed to the appropriate NEMA or IEC standard.

[CGD 74–125A, 47 FR 15236, Apr. 8, 1982, as amended by CGD 94–108, 61 FR 28283, June 4, 1996]

## §111.81-3 Cables entering boxes.

Each cable entering a box or fitting must be protected from abrasion and must meet the following:

- (a) Each opening through which a conductor enters must be closed.
- (b) Cable armor must be secured to the box or fitting.
- (c) Each cable entrance in a damp or wet location must be made watertight by a terminal or stuffing tube.

# Subpart 111.83—Shore Connection Boxes

#### §111.83-1 General.

Each shore connection box must be of a size that accommodates the connections of the flexible and fixed cables.