§ 159.83 Level indicator.
Each sewage retention device must have a means of indicating when the device is more than \( \frac{3}{4} \) full by volume.

§ 159.85 Sewage removal.
The device must be designed for efficient removal of nearly all of the liquid and solids in the sewage retention tank.

§ 159.87 Removal fittings.
If sewage removal fittings or adapters are provided with the device, they must be of either \( \frac{11}{2}'' \) or \( 4'' \) nominal pipe size.

§ 159.89 Power interruption: Type I and II devices.
A discharge device must be designed so that a momentary loss of power during operation of the device does not allow a discharge that does not meet the requirements in §159.53.

§ 159.93 Independent supporting.
The device must have provisions for supporting that are independent from connecting pipes.

§ 159.95 Safety.
(a) Each device must—
(1) Be free of design defects such as rough or sharp edges that may cause bodily injuries or that would allow toxic substances to escape to the interior of the vessel;
(2) Be vented or provided with a means to prevent an explosion or over pressurization as a result of an accumulation of gases; and
(3) Meet all other safety requirements of the regulations applicable to the type of vessel for which it is certified.

(b) A chemical that is specified or provided by the manufacturer for use in the operation of a device and is defined as a hazardous material in 46 CFR Part 146 must be certified by the procedures in 46 CFR Part 147.

(c) Current carrying components must be protected from accidental contact by personnel operating or routinely servicing the device. All current carrying components must as a minimum be of drip-proof construction or be enclosed within a drip-proof compartment.

§ 159.97 Safety: inspected vessels.
The Commanding Officer, USCG Marine Safety Center, approves the design and construction of devices to be certified for installation and operation on board inspected vessels on the basis of tests and reports of inspection under the applicable marine engineering requirements in subchapter F of Title 46, Code of Federal Regulations, and under the applicable electrical engineering requirements in subchapter J of Title 46 Code of Federal Regulations.

§ 159.101 Testing: general.
Unless otherwise authorized by the Coast Guard, a recognized facility must perform each test described in §§159.103 through 159.131. The same device must be used for each test and tested in the order in which the tests are described. There must be no cracking, softening, deterioration, displacement, breakage, leakage or damage of components or materials that affects the operation or safety of the device after each test described in §§159.103 through 159.117 and §159.121, and the device must remain operable after the test described in §159.119. The device must be set up in a manner simulating installation on a vessel in accordance with the manufacturer’s instructions with respect to mounting, water supply, and discharge fittings.

§ 159.103 Vibration test.
The device, with liquid retention components, if any, filled with water to one-half of their volume, must be subjected to a sinusoidal vibration for a period of 12 hours, 4 hours in each of the x, y, and z planes, at the resonant frequency of the device (or at 55 cycles per second if there is no resonant frequency between 10 to 60 hertz) and with