(4) Components that may be installed in exposed areas on the open deck or in enclosed spaces not environmentally controlled must be subjected to a low temperature test of −25 °C and a high temperature test of 55 °C for a period of 2 hours at each temperature. At the end of each test, the components are to be switched on and must function normally under the test conditions.

(5) Components that may be installed in enclosed spaces that are environmentally controlled, including an engine room, must be subjected to a low temperature test at 0 °C and a high temperature test at 55 °C, for a period of 2 hours at each temperature. At the end of each test, the components are to be switched on and must function normally under the test conditions.

(6) Components must be switched off for a period of 2 hours at a temperature of 55 °C in an atmosphere with a relative humidity of 90 percent. At the end of this period, the components must be switched on and must operate satisfactorily for 1 hour under the test conditions.

(7) Components that may be installed in exposed areas on the open deck must be subjected to tests for protection against heavy seas in accordance with IP 56 of publication IEC 60529 (incorporated by reference, see § 162.060–5) or its equivalent.

(8) Components must operate satisfactorily with a voltage variation of ±10 percent together with a simultaneous frequency variation of ±5 percent, and a transient voltage of ±20 percent together with a simultaneous transient frequency of ±10 percent and transient recovery time of 3 seconds.

(9) The components of a BWMS must be designed to operate when the vessel is upright and inclined at any angle of list up to and including 15° either way under static conditions and 22.5° under dynamic, rolling conditions either way and simultaneously inclined dynamically (pitching) 7.5° by bow or stern. Deviation from these angles may be permitted only upon approval of a written waiver submitted to the Coast Guard in accordance with § 162.060–10(b)(1) of this subpart, taking into consideration the type, size, and service conditions and locations of the vessels and operational functioning of the equipment for where the system will be used. Any deviation permitted must be documented in the type-approval certificate.

(10) The same component(s) must be used for each test required by this section and testing must be conducted in the order in which the tests are described, unless otherwise authorized by the Coast Guard.

§ 162.060–32 Testing and evaluation requirements for active substances, preparations, and relevant chemicals.

(a) A ballast water management system (BWMS) may not use an active substance or preparation that is a pesticide unless the sale and distribution of such pesticide is authorized under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) for use in ballast water treatment prior to submission to the Coast Guard for approval of the BWMS. This requirement does not apply to the use of active substances or preparations generated solely by the use of a device (as defined under FIFRA) onboard the same vessel as the ballast water to be treated.

(b) The manufacturer of a BWMS that uses an active substance or preparation that is not a pesticide, or that uses a pesticide that is generated solely by the use of a device (as defined under FIFRA) onboard the same vessel as the ballast water to be treated, must prepare an assessment demonstrating the effectiveness of the BWMS for its intended use, appropriate dosages over all applicable temperatures, hazards of the BWMS, and means for protection of the environment, and public health. This assessment must accompany the application package submitted to the Coast Guard.

§ 162.060–34 Test Report requirements.

The Test Report prepared and submitted by an independent laboratory must be formatted as set out below.