



## NSCV PART C SUB-SECTION 5A - MACHINERY – EXHAUST SYSTEMS

**NOTE:** This GES was endorsed by Peer Advisory Network on 22 July 2010 and originally published by the NMSC as GES 2010-01.

### Application

- (a) - Class 1C vessels of any length where the height of discharge above the deepest loaded waterline is less than 75 mm on wet exhaust
- (b) - Class 1D, 1E, 2C, 2D, 2E, 3C, 3D and 3E of any length where the height of discharge above the deepest loaded waterline is less than 75 mm on wet exhaust

### Requirement

Clause 2.19.9.5 *Watertight integrity of exhaust pipe discharges* states that “Exhaust pipe discharges shall be arranged such that a breach of the exhaust pipe (e.g. through corrosion or fatigue) will not result in flooding of the vessel.” It then states that a shut-off valve is required where the exhaust terminates below 225 mm above the loaded waterline.

### Equivalent Solution

- (a) Class 1C vessels of any length where the height of discharge above the deepest loaded waterline is less than 75 mm on wet exhaust.**

A shut-off valve is not required if all of the following are satisfied:

1. Bilge alarms fitted in the compartments that the exhaust passes through.
2. Flowmeter is fitted with alarm for the water injection line for wet exhaust indicating failure of water supply.
3. Exhaust gas pyrometer with alarm for high gas temperature indicating failure of cooling water system is fitted.
4. An assessment of damaged stability for the compartments in case of water ingress has been undertaken
5. The exhaust system is at least as strong as, and have similar properties to, the surrounding hull that it penetrates.

- (b) Class 1D, 1E, 2C, 2D, 2E, 3C, 3D and 3E of any length where the height of discharge above the deepest loaded waterline is less than 75 mm on wet exhaust.**

A shut-off valve is not required if all of the following are satisfied:

1. Bilge alarms fitted in the compartments that the exhaust passes through.
2. An assessment of damaged stability for the compartments in case of water ingress has been undertaken
3. The exhaust system is at least as strong as, and have similar properties to, the surrounding hull that it penetrates.

**Plus** one of the following measures is satisfied:

- (i) Flowmeter is fitted with alarm for the water injection line for wet exhaust indicating failure of water supply.
- (ii) Exhaust gas pyrometer with alarm for high gas temperature indicating failure of cooling water system is fitted.