



Maritime and Coastguard Agency

USE OF LIQUID PETROLEUM GAS (LPG) AND DIESEL FUELLED APPLIANCES ON FISHING VESSELS.

Notice to all Note to Designers, Builders, Owners, Employers, Skippers and Crews of Fishing Vessels.

This notice supersedes MGN192 (F)

Summary

This note gives advice on reducing the risk of explosion or Carbon Monoxide Poisoning from the fitting and use of the following for heating accommodation spaces on board fishing vessels:

- Liquid Petroleum Gas (LPG) heaters and cookers
- “Closed flame” Diesel heaters

Introduction/ Background

1. The use of LPG or Diesel oil as a direct means of heating crew accommodation is not permitted in fishing vessels of 24 metres registered length or over. The main heating system on such vessels must be supplied by steam, hot water, electricity or alternatively by a system supplying warm air (i.e. fans/ducting).

2. On vessels less than 24 metres in registered length, LPG and Diesel fuelled heating systems may be used. If these systems are not installed and maintained correctly, death or serious injury may occur as a result of a fire, explosion or carbon monoxide poisoning.

3. The Code of Safe Working Practice for The Construction and Use of 15m LOA to Less Than 24 metre Registered Length Fishing Vessels contains the following requirements, the MCA strongly recommends that these requirements also be applied to vessels of 15m LOA and under.

4. For LIQUID PETROLEUM GAS (LPG) HEATERS AND COOKERS. The following summarises the main requirements of MSN 1770 The Code of Safe Working Practice for The Construction and Use of 15m LOA to Less Than 24 metre Registered Length Fishing Vessels.

- Installations using LPG should be safely fitted and protected from damage. BS EN (ISO) 10239 provides guidance on this.
- LPG Cylinders/Bottles should be stored on deck or in a well ventilated compartment on deck

- Spaces containing LPG appliances should not have openings leading directly below to accommodation spaces or their passageways (unless specific provision is made for mechanical exhaust and supply ventilation).
- Spaces containing an LPG appliance should be adequately ventilated.
- Spaces containing an LPG appliance should be provided with a gas detector with an audible alarm and control unit outside the space. In sleeping quarters, the alarm should be located inside the compartment.
- A device should be fitted in the supply pipe from the gas container to the appliance that will automatically shut off the gas in the event of a loss in pressure in the supply line. Manual resetting of this device must be the only means of restoring the supply.
- An automatic flame failure device shall be fitted on all appliances consuming LPG.
- LPG heating appliances used in any accommodation space (in addition to sleeping quarters) should be fitted with a flue to the exterior of the vessel via a clear unblocked exhaust.
- Carbon monoxide monitoring devices should be fitted in all compartments where LPG heating appliances are fitted.

5. Crew members should be aware of the action to take in the event of gas leakage. A suitable notice should be displayed prominently in the vessel, detailing the action to be taken when a gas alarm activates or a leak is suspected. The notice should include the following information:

- All gas-consuming appliances should be SHUT OFF at the main supply from the container(s)
- NO SMOKING should be permitted until it is safe to do so
- NAKED LIGHTS should never be used as a means of locating gas leaks.

CLOSED FLAME DIESEL HEATERS AND COOKERS

6. Heaters consist of a closed combustion chamber, used to heat air supplied by an (integral) electric fan. Combustion air inlet and exhaust lines are fitted in isolation to the heating air.

7. The Construction and Use of 15m LOA to Less Than 24 metre Registered Length Fishing Vessels permits the use of such installations as heating appliances. The requirements are:-

- The fuel tank is to be fitted outside the space containing the heating appliance. Fuel supply lines should be made of steel.
- The supply of oil shall be capable of being controlled outside that space (i.e. a remote operated valve shall be fitted).
- Means should be provided to shut off the fuel supply automatically at the cooking range in the event of a fire or if the combustion air supply fails. Manual resetting of this device is then necessary to restore the fuel supply.
- The fuel is to have a flash point of at least 60°C. The use of petrol is not permitted.

- The fuel tank must be fitted with an air pipe, including anti- flash gauze.
- Adequate means shall be provided for filling the tank and preventing overpressure.

In addition to the requirements above, the following provisions are strongly recommended:

- Combustion air intakes and exhaust should lead to outside the vessel and be positioned a sufficient distance apart.
- The exhaust should be suitably lagged.

In all instances, the manufacturer's installation instructions must be followed.

Further Information

Further information on the contents of this Notice can be obtained from:

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