



Friday 23rd November 2012

Bulletin 856 - 11/12 - Fuel oil change-over procedures - Europe

Members are reminded of EU Directive 2005/33/EC which came into force on January 1, 2010. This requires that the fuel oil used by ships while 'at berth' in EU ports is to be limited to 0.1% m/m maximum sulphur content.

The particular requirements within Article 4b are:

The change-over to this 0.1% m/m maximum sulphur fuel oil is to be undertaken as soon as possible after arrival and from it as late as possible prior to departure (allowing sufficient time for the crew to complete any change-over).

The times of these change-overs are to be recorded in the ship's logbook.

The Club's Risk Assessors whilst visiting ships in Dutch and Belgium ports are finding that a significant number of ships are changing their auxiliary equipment (generators and boilers) from Heavy Fuel Oil to <0.1% sulphur fuel (e.g. Marine Gas Oil (MGO)) before picking up the pilot or when on passage to the berth. Outbound, the change-over was being made after leaving the berth.

The UK P&I Club's latest supplement **Risk Focus: Loss of Power** identified a marked increase in main engine and generator failures occurring during critical manoeuvring operations which could lead to catastrophic damage to ships and property.

It was also noted that the compliance with Emission Control Regulations (both in Europe and the US) could be a contributory factor in these failures.

Risk Focus: Loss of Power also pointed out that if a vessel changes over from HFO, when MGO is introduced into the fuel system it may act like a solvent, releasing any asphaltenes (sludge) which then collect in the fuel filters/strainers and clog them which could result in a blackout.

Further problems may occur as a result of introducing relatively cool MGO into a fuel system that is already hot (e.g. “gassing up” of the fuel, thermal stressing etc.). Fuel pump leakage, seizure and decreased efficiency may also be experienced.

The procedure of changing from one type of fuel to another will, therefore, involve a degree of risk and could possibly result in a blackout situation. The consequences of this scenario may be largely minimised by making the fuel change-over after the ship is safely secured inside the port rather than being underway in probably congested / restricted waters.

There are no requirements of the regulations that oblige a ship to make the change-over before berthing (which not only increases potential risk but also fuel costs) only to do so “as soon as possible after arrival and from it as late as possible prior to departure”.

For practical purposes “after arrival” would be when the order “Finished with Engines” is given. Departure time should be set on the basis of the time notified as when engines are first required, reasonable delays accepted. Change-over times should be recorded in a logbook which is countersigned by either the Master or Chief Engineer.

Further guidance can be found from the Lloyd’s Register publication Frequently Asked Questions on the ‘At Berth’ requirements;

http://www.lr.org/Images/At%20berth%20FAQ%20Final_V2a_tcm155-175157.pdf

The Clubs publication ***Risk Focus: Loss of Power*** can be found at the following web address; <http://www.ukpandi.com/loss-prevention/article/risk-focus-loss-of-power-5550/>

Source of Information:

C.Eng Antony Watson

UK P&I Club

antony.watson@thomasmiller.com