



## **US Coast Guard - low sulphur fuel issues**

The US Coast Guard (USCG) has voiced concerns about the increasing number of vessels at risk of experiencing loss of propulsion when performing fuel change-over operations.

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As part of the increasingly stricter air emission limits enforced through MARPOL Annex VI, vessels operating in the established Emission Control Areas (ECAs) can, as of 1 January 2015, no longer use fuel with a sulphur content exceeding 0.10 per cent by weight unless an approved exhaust gas cleaning system is installed. As the machinery systems of many vessels were not designed to operate on low sulphur fuels, difficulties can arise when switching from one fuel to another, both during the actual fuel change-over and during continuous operation on low sulphur fuel.

Recent developmentAccording to the type: asset-hyperlink id: 017fb9e3cb6b40f1aec6787093bd2332 of 3 March 2015, vessels have reported several incidents involving substantial fuel leakages while switching fuel to ensure compliance with the North American ECA requirements. Although these leakages were contained, the USCG emphasises that fuel releases of any kind can lead to more serious incidents involving pollution, engine room fires, and personal injuries.

The USCG also reports that many losses of propulsion have occurred in various ports and have been associated with fuel change-over processes and procedures. Sector New Orleans is one of the USCG Units that have recently expressed concerns about the increasing number of vessels at risk of suffering a loss of propulsion when performing fuel change-over operations.<sup>1</sup> A number of vessels have apparently entered the Vessel Traffic Service (VTS) Lower Mississippi River Area without sufficient quantities of compliant fuel onboard. The vessels have then obtained compliant fuel after arriving at a port in the Greater New Orleans area and performed their fuel change-over operation in port, or under way to ports in the Lower Mississippi River. As a consequence, the USCG Captain of the Port (COTP) New Orleans has now determined that fuel change-over operations performed in the VTS Lower Mississippi River Area are “hazardous conditions” that shall be reported to the Coast Guard.<sup>2</sup>

RecommendationsMeeting the new sulphur emission limits by changing to a compliant low sulphur fuel prior to entering an ECA requires planning and analysis. The ISM Code Section 1.2.2.2 requires that owners and managers assess the risks that may be involved when switching between high and low sulphur fuels, by systematically identifying and analysing potential hazards to the vessel, personnel and the environment. Appropriate maintenance (ISM Code Section 10) and operational procedures (ISM Code Section 7) should be developed based on the outcome of the risks analyses and should be updated on basis of experience.

***1) Members and clients with vessels operating in any one of the established ECAs***, currently the North American area, the US Caribbean Sea area, the Baltic Sea area and the North Sea area, are reminded that:

- low sulphur fuel must be used the entire time the vessel is operating within an ECA, on inbound and outbound transits as well as at the dock; and
- each vessel must develop and implement suitable shipboard procedures for fuel change-over in accordance with MARPOL Annex VI, Regulation 14.6, allowing sufficient time to complete the fuel oil change-over prior to crossing the ECA border.

For more information on the operational effects of switching between high and low sulphur fuels and the potential risks involved, please see Section 3 of Gard’s Loss Prevention Circular No.06-14 “[Preparing for low sulphur operation](#)”.

***2) Members and clients with vessels operating in the US and bound for ports in the Lower Mississippi River*** should bear in mind the above and should, in addition, and as required by the COTP New Orleans:

- report to the USCG all known or anticipated reductions in manoeuvrability as a result of using MARPOL compliant low sulphur fuel; and

- when ordering a Mississippi River Pilot, report to the pilot dispatch any changes in the vessel's performance compared with the information stated on the pilot card, as a result of using MARPOL compliant low sulphur fuel. The same information should be promptly communicated to the assigned pilot.

If for some reason the fuel change-over operation must be performed after the vessel has entered the VTS Lower Mississippi River Area, the COTP provides three options: continue to use non-compliant fuel while underway; employ tugs during the change-over operation; or perform fuel change-over while dockside or at anchorage. It is important to note, however, that these options have been offered by the COTP only as a means of enhancing safety and reducing the risk of loss of propulsion incidents occurring in the area. If a vessel chooses to enter the VTS Lower Mississippi River Area using non-compliant fuel, the COTP will notify the Environmental Protection Agency and "take appropriate enforcement action" in accordance with existing Coast Guard policy regarding use of non-compliant fuel.<sup>3</sup>

1 See US Coast Guard Marine Safety Information Bulletin Nos. type: asset-hyperlink id: ab9f93974a634016878bd75a2f0adbb4 and type: asset-hyperlink id: 53af11fdaf8443d496e646f5136d9e1b.

2 In accordance with 33 CFR 160, a "hazardous condition" is any condition that may adversely affect the safety of any vessel, bridge, structure, or shore area or the environmental quality of any port, harbour, or navigable waterway of the US. Whenever there is a "hazardous condition" either aboard a vessel or caused by a vessel or its operation, the owner, agent, master, operator, or person in charge shall immediately notify the nearest Coast Guard office.

3 See also Gard Alert "[US penalty policy for ECA violations](#)" of 22 January 2015.