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Chlorinated hydrocarbons detected in Singapore

Veritas Petroleum Services, via in-house GC-MS (Gas Chromatography - Mass Spectrometer) headspace analysis methodology, has detected chlorinated hydrocarbons on fuel samples representing HSFO deliveries in Singapore.

The fuel deliveries were made by a couple of suppliers.

The chlorinated hydrocarbons detected; Tetrachloroethylene and Trichloroethane, do not originate from normal refinery processes and are subsequently an indication of possible contamination. The consequences such contamination can have upon vessel operations are, worn out fuel pumps, fuel valve problems and subsequently main-and/or auxiliary engines failing to start.

Although the test results of most samples from these fuel deliveries met the ISO 8217 specification, the detection of these chlorinated hydrocarbons are a good indication that these fuels are capable of causing potential operational issues. Therefore, the ship crew must be advised to take additional care when such fuel are to be used.

Please note that Clause 5 of ISO 8217:2010 states, 'The fuel shall not contain any additive at the concentration used in the fuel, or any added substance or chemical waste that



a) jeopardizes the safety of the ship or adversely affects the performance of the machinery; or b) is harmful to personnel; or c) contributes overall to additional air pollution.'

Although within the ISO 8217 specification, these fuels also have a high TSP ranging up to 0.08%.

Ships consuming these fuels, due to the high TSP, might experience increased sludge formation, particularly at the centrifuges and filters, leading to possible blockage and loss of centrifuge and filter functions. Elevated sediment levels will make optimum on-board bunker treatment more difficult to achieve.

It is further recommended to take samples before and after the fuel treatment plant to gauge the fuel oil quality at the engine inlet. This will help in any subsequent assessment of increased engine wear and damages, and in resolving fuel quality disputes.

This Bunker Alert does not necessarily reflect the overall fuel quality supplied at the subject port but if your ship recently bunkered at this port or intends to do so, please ensure the fuel quality is known before use.

VPS laboratories and regional offices span all time zones and can assist you with further commercial and technical advice if required.

For further clarifications email us at technical@vpsveritas.com or speak with your Account manager. More contact details at www.vpsveritas.com.