

News 04 Mar, 2021

ISO Review of 2020 Marine Fuels Quality



Dmitry Kisil
Senior Loss Prevention Officer

In response to the shipping community's concerns about the characteristics of Very Low Sulphur Fuel Oil (VLSFO), an ISO Review of 2020 Marine Fuel Quality in January 2021 will be submitted to the IMO Marine Environment Protection Committee (MEPC) for its upcoming 76th session scheduled for June 2021.

The Review was based upon information correlated by the ISO committee responsible for the International Standard ISO 8217 Petroleum products – Fuels (class F) – Specifications of marine fuels. They looked at the main characteristics of VLSFO bunkers supplied to ships in the period from January to June 2020 and compared this global fuel quality data with the quality of High Sulphur Fuel Oil (HSFO) provided in 2018 from January to June.

The Review's findings that shipowners should be aware of pertains to changes found within key bunker fuel parameters - viscosity, density, MCR, CCAI, net specific energy, and pour point. Of interest amongst the findings are those expressed below:

- The range of viscosity test values of VLSFO in 2020 was broader compared to HSFO in 2018, suggesting that VLSFO appears to have considerably less resistance to flow.
- 19% of 2020 VLSFO samples had a pour point above 21°C being substantially more than only 2% of HSFO samples in 2018.
- VLSFO samples in 2020 showed Total Sediment (TSA/TSP) values, being a characteristic of stability, exceeding the specified limit of 0.10 mass%. However, operational problems with VLSFO, where the TSA/TSP values are well below the prescribed limit, have been reported because of sediment formation occurring within the fuel.

More research is required to understand better the factors that influence the stability of VLSFO. Meanwhile, fuel testing laboratories report that VLSFO's appear to have a much shorter shelf-life than other traditional types of fuels.

Visit Neptune



Considering the characteristic changes highlighted above, it means that VLSFO requires extra attention to the onboard fuel management practices concerning storage, treatment and fuel handling temperatures, and relevant operational procedures may need revision.

The Review prompted the ISO committee to assess ISO 8217:2017 and consider the relevant changes needed within the next standard edition, with anticipated publication in 2023. The full text of the IMO MEPC 76/5 is accessible via the Club's global information portal for Members (Neptune) within the Bunker Information tab under the VPS Port Alerts Section.