

ISO TC28 SC4 WG6 – for ISO 8217:2017 – Petroleum Products - Specifications of Marine Fuels – *Covers 2020 0.50% Sulphur Fuels*

Lately, several assertions have been made that ISO 8217:2017 does not encompass future max. 0.50% Sulphur marine fuel oils and these to potentially cause severe safety issues. As these claims create quite some anxiety in the industry, the ISO working group, whilst respecting the anxiety raised, would like to reassure the industry that the General requirements of ISO 8217:2017 along with the characteristics included in Table 1 and 2 of ISO 8217: 2017 cover 2020 0.50% max. Sulphur fuels in the same way as they cover today's fuels including the 0.10% max. Sulphur fuels. ISO 8217 reflects on the technical requirements for machinery operations and considers the aspects of safety, environment, onboard handling (storage and cleaning) and combustion of not only today's fuels but also of the anticipated 0.50% max. Sulphur fuels of 2020, irrespective of the Sulphur content of the fuel oils.

Flashpoint (in accordance with SOLAS requirements), stability and cold flow are key fuel characteristics that must be addressed for all fuel oils delivered. The limits of these characteristics as set down in the ordering specification given by the purchaser, which should reference the ISO 8217 specification, when not met, may indeed result in operational problems with possible safety implications in the severest of cases.

There is a specific concern on the fuel oil blends as modelled by CE Delft in the IMO fuel oil availability study, containing H-oil bottoms and the potential risk of obtaining unstable fuels if not properly blended. As with today's fuels, all marine fuels delivered to ships shall be stable and meet the ISO 8217 total sediment potential requirement of 0.10 % maximum, which provides the criteria to be met for fuel oil stability.

The consequences of fuel instability such as filter clogging and centrifuges blocking are well-known and it is to be expected that fuel oil blenders and suppliers must take careful note of these consequences ensuring this fuel characteristic is not overlooked and that the fuel is delivered to the ship as a homogenous and stable product.

Also, as fuel oil blend formulations are expected to vary widely across the regions ships will, as they do today, have to consider the risk of incompatibility when using consecutive fuels from different ports and regions. Compatibility

between different fuels cannot be guaranteed by the suppliers and it falls on the competency of the crew to manage this. Recognising that some degree of mixing of different fuel oils onboard the ship cannot be avoided, many ships today have already procedures in place to minimise commingling of fuel oils with bunker segregation being always the first option and are encouraged to evaluate further their segregation policy.

The ISO 8217 working group has initiated the development of a Publicly Available Specification (PAS) *“Considerations for fuel suppliers and users regarding marine fuel quality in view of the implementation of maximum 0.50 % S in 2020”* in response to the IMO request to consider the framework of ISO 8217 with a view to ensuring consistency between the relevant ISO standards on marine fuel oils and the implementation of the 0.50 % S max. limit. Given that these 0.50% max. Sulphur fuel oils will be fully capable of being categorised within the existing ISO 8217 standard, the PAS will provide guidance as to the application of the existing ISO 8217 standard to such fuel oils. Furthermore, at this time no new characteristic is currently being considered for inclusion.

Regarding the stability of fuel oils, ISO 8217 working group has initiated a test program to investigate whether test methods currently not yet widely used for marine fuel stability testing, can provide further and consistent information on the stability and potential instability of a wide range of different fuel blend formulations (or mixtures thereof) that are anticipated to likely represent what will be available in the market from late 2019.

The ISO 8217 working group is also working closely with CIMAC and will contribute to the initiative taken by OCIMF and IPIECA to develop a guidance document to bring awareness to, and to assist crew and ship operators in the safe onboard handling of future 0.50 % S max. fuel oil blends, considering their potential impact on operational aspects.

Although concern has been raised that the 0.50% max. Sulphur fuels will only be introduced later in 2019, it is clear from the fuel testing agency statistics that the share of 0.50% max. Sulphur fuels in the market is already growing, all of which are meeting the requirements of ISO 8217.