FOBAS Bulletin

18th December 2023

Update on Fuel Contamination in US Gulf Area (Houston and New Orleans)

This update follows our previous bulletin from July, viewed here, where we highlighted problems experienced by some vessels after bunkering in Houston and New Orleans and some of the chemicals found in those fuels under in-depth investigation.

Although the problems seemed to peak around summer, we are still getting reports of issues as vessels put contaminated fuels into use and are still seeing unusual chemicals in fuels recently bunkered, specifically in Houston and New Orleans ports.

In our previous bulletin we mentioned glycols, tetrachloroethylene, Tetrahydro and Dihydro DCPD along with low levels of FAME. In some more recent cases there are also a number of unidentifiable chemicals, free fatty acids and signs of high concentrations of unknown esters. Noting on further investigation that Tetrahydro and Dihydro DCPD were also in bunkers loaded on ships that did not report back to us any issues, we have deepening concerns about what the unidentifiable chemicals not detected actually are.

The exact chemistry involved in the fuel and its interaction with the system components leading to the observed problems is still unclear. Reported issues have been linked specifically with fuel pump damage, but maybe the cause of other issues reported by some ships including excessive sludge causing blockage of filters and purifiers and elevated exhaust gas temperature.

The most recent confirmed problem fuel was bunkered in mid-October, however as this has been such a long lasting and wide reaching issue, we would still be concerned about fuels being bunkered in this US Gulf area. The majority of the fuels in question are low viscosity (20 – 100cSt) VLSFO's with acid numbers between 0.50 – 1.50 mgKOH/g. We would be particularly concerned if fuels being bunkered are in this range and recommend acid number testing is carried out as a precaution on any VLSFO fuel in the area. The number of ships reporting similar issues and the concerns raised from our investigative analysis therefore points away from any ship's specific fuel management or machinery compatibility and more towards the fuel as supplied.

As ever, it should be confirmed with fuel suppliers that they have checked with those formulating the blends that the blend stocks they use are screened from known sources and deemed ' bunker acceptable'. Furthermore, they should confirm the fuel to be bunkered meets not only ISO8217 in its entirety and Table 2 limits, but also the general requirements of fuel quality. ISO8217 states that a refinery, fuel terminal or any other supply facility, including supply barges and truck deliveries, have in place adequate quality assurance and management of change procedures to ensure that the resultant fuel is compliant with the requirements of Clause 5 of the Standard.

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