FOBAS Bulletin

5th May 2022

Microbial Contamination and Monitoring

Further to the recent LR class news update drawing attention to the risks of microbial contamination and damage to ships tanks if left untreated, we would like to follow this up from a marine fuel perspective.

When talking about microbial contamination this can include bacteria, yeast and mould and different strains of each. Certain microbes are present in all environments in air and water and under the right conditions can quickly multiply.

Microbes need a habitable temperature, a food source and water, all of which can be found in many fuel tanks. In heavy residual fuels the temperatures involved in storage, handling and treatment are often enough to kill microbes. However, in marine gas oil and low viscosity fuel oils, the conditions can be much more suitable for growth.

Depending on the type of microbes present, the problems can be different but some can cause corrosive damage to storage tanks if left untreated whilst others may produce a thick slime which could block fuel filters and may have to be manually removed from tanks affected.

As mentioned, MGO fuels are more susceptible than HFO/VLSFO fuels to microbial contamination. In addition, fuel containing FAME and other bio-products are often more susceptible due to being more hydrophilic and potentially containing higher water content.

Please contact Lloyds Register FOBAS if you have any concerns relating to microbial activity in your fuel storage tanks as we provide various testing regimes to determine microbial contamination in the fuels as well as to monitor such contamination in fuel storage tanks.

If you require any further information about this Bulletin, please contact us at fobas@lr.org or speak to one of our consultants on +44 (0)330 414 1000 (Southampton UK), +44 (0)1642 440991 Redcar (UK), +65 3163 0888 (Singapore), +30 211 990 7732 (Greece). For anything urgent, please contact us via our out of office number, +44 (0)1642 425660.