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ISO 8217:2010 - The Denouement

"I told you so" is such a nice feeling when almost everyone takes the opposing point of view and subsequent events prove you right. Here is the what happened recently.

A shipping company ordered bunker fuel. The test lab reported presence of styrene, alpha methyl styrene and DCPD at very high levels. This lab recommended that the fuel should not be used. The supplier disagreed and the buyer and the supplier agreed to subject this fuel to analysis at another well known lab for final resolution which should be accepted by both parties. This second lab also came up with very high values for styrene, DCPD, dihydro-DCPD and very high Indene as well. It was obvious that these were residues from Ethylene cracker from a petrochemical plant. To assign a group name, these are "chemical wastes" from a petrochemical plant added to the bunker fuel.

The supplier was unfazed by the high numbers of these substances in the fuel. He first of all argued that as long as the substance is a hydrocarbon, namely a molecule comprised solely of carbon and hydrogen, it can be added to the bunker fuel. *It looks like he claimed the right to add any amount of even benzene!, even if it has such toxic potential.* In fact, the supplier went further. He claimed that the constituents from Ethylene Cracker Residue (ECR) can be added and has been always added to bunker fuel. In fact, he claimed that the residue from ECR is an accepted and allowed blend component.

Even assuming this extreme claim that these chemical wastes can be added, how much can be added? After all everything depends on the quantum of the contaminants present, the threshold level above which these contaminants can cause machinery problems and machinery damage.

Let us look at the wording of ISO 8217:2010 and the equivalent wording in ISO 8217:2005.

ISO 8217:2005 states *“The fuel shall be a homogeneous blends of hydrocarbons derived from petroleum refining. This shall not preclude the incorporation of small amounts of additives intended to improve some aspects of performance.”* However in 8217:2010, the "small amount" was deleted!!! The supplier got the license to incorporate large amounts "additives" which could also mean chemical waste!

Not stopping here, the supplier also wanted to cover himself against a potential claim and referred to Annex B - Deleterious material of ISO 8217:2010 standard which states *"It is not therefore practicable to require detailed chemical analysis for each delivery of fuels beyond the requirements listed in the international standard"*. It is important to note that ISO 8217:2005 had no Annex B at all. This Annex B was introduced in 2010 standard mainly to protect the supplier when the presence of chemical wastes were identified in the bunker fuel and one of reasons given for this in Annex B is *"various analytical techniques are used to detect these contaminants and specific chemical species with no standardized approach;"* Even in a case like this, where both labs recorded high levels of contaminants, the supplier took cover under the final statement of this Annex B that only the requirements listed in ISO 8217:2010 need to be met. Most unfortunately, 99.99% of fuels that give problems in the machinery comply with ISO 8217.

What this proves is that ISO 8217:2010 is a standard which has been designed to be very kind to the supplier and to lower the bar of fuel quality even more. No doubt some window dressing was provided in 2010 so that a claim could be made that the new standard actually raised the quality level of the fuel. One of these window dressings was to lower the catfine from 80 ppm to 60 ppm when the global average catfine stands at 19.8 ppm!

It is a matter of satisfaction that most fuel buyers are still going by ISO 8217:2005. Those who think that newer is better are in for a major disappointment, particularly when a supplier decides to take advantage of the ISO 8217:2010 standard.

If you need further help or assistance, please contact us.

Best regards,
Dr.Vis

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