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**Notice on potential mishandling of Bio Diesel Fuel (BDF)**

As you are aware, recent development in BDF production in Korea, Taiwan and Malaysia by their national policy is likely to enlarge their respective domestic markets, which in turn leads us to believe that it shares shore tanks, pipelines and/or other facilities with the ordinary Diesel/Gas Oil (generally called “Gas Oil” in most cases) and that such BDF-blended Diesel/Gas Oil will inevitably retain a certain amount of FAME (Fatty Acid Methyl Ester). In Japan, however, the Diesel/Gas Oil is extracted from petroleum and classified by standard for its quality into the following two categories based on the FAME content:-

Diesel/Gas Oil (BDF is not blended): 0.1 mass % or below of FAME

BDF-blended Diesel/Gas Oil: 5.0 mass % or below of FAME

Such fundamental difference between countries listed above and Japan in terms of definition of Diesel/Gas Oil might involve the parties concerned with unfortunate claim cases as listed below: -

1. Unless the quantity of FAME is defined in detail on the sales contract, the cargo which may contain a certain level of FAME is subject to a serious issue of claims afterwards. To mitigate the problem, the carrier may submit the records of tank history and loading port, otherwise, it will become a serious issue.
2. In case the immediate last cargo was the BDF-blended Diesel/Gas Oil, and the next cargo is the Jet Fuel, then the most careful handling is required as follows:-

The current international standard for the Jet Fuel stipulates that FAME must be less than **5 ppm**. Most of the Tank Cleaning Guidelines at present specify to “clean with cold sea water” or “drain well” when loading Jet Fuel into the same tank after Diesel/Gas Oil. This will cause FAME contamination at a very high possibility since FAME tends to remain at tank walls and/or inside pipelines. Oil Majors found this problem at earlier stage and their Tank Cleaning Guidelines are being revised as follows: -

- (1) Clean with hot fresh water, including seawater, at 60°C or higher.
- (2) Rinse with fresh water.
- (3) Drain pipelines completely and mop up the tank.

Once any FAME is mixed with Jet Fuel, it will come out at a high altitude (because of its high Pour Point) and block the fuel filter and come to halt the engine(s), with the potentially unrecoverable damage to the parties concerned.

It is, therefore, recommended strongly for all those who are involved with loading Jet Fuel to adopt the cleaning method used by the Oil Majors as mentioned above.