

## **DIRECTORATE GENERAL OF BORDER ROADS**

### **GENERAL MAINTENANCE INSTRUCTION NO.108**

#### **ON**

#### **HANDLING AND STORAGE OF FUEL OIL**

#### **Introduction**

1. Improper handling and storage of fuel oil causes major troubles in the fuel system. The interval between the receipt of the fuel and it's final used in the engine is critical to proper function of the engine.

#### **Action by**

2. **User Units :** To take necessary action as given in para 3 below.

#### **Details**

3. The following points should be kept in mind and used as a check list in order to maintain trouble-free fuel system :-

- (a) Take all precautions necessary to prevent entrance of dirt and moisture into the system. Contamination by these materials accelerate sludge formation, clogs filters, fuel lines and nozzles and causes abnormal wear on close fitting parts in the fuel injection pump.
- (b) Regardless of storage time a fuel tank is preferable to one that is only partially filled.
- (c) Moisture does not accumulate as rapidly in under ground storage tanks as it does in above grounds tanks/containers because temperature is more suitable. Cooling and heating of above ground tanks/containers causes condensate to accumulate rapidly. Such tanks/containers should be placed at an engine to horizontal and be equipped with drain cock valve at the lowest point. Condensate and sediments should be drained at regular intervals. In the case of barrels these should be kept vertical, the filling caps are properly tightened, and enough time should be given for setting down condensation and sediments before these are decanted.
- (d) Do not open fuel containers or transfer fuel from barrels to small containers (Jerrican etc) in areas exposed to blowing dust, dirt and

rains. Also do not use cotton waste to wipe containers, funnels, hand pumpetc.

- (e) The maximum recommended storage period for current type of Diesel fuel is 6 months to one year. If long storage of Diesel fuel is used, it may invite clogged fuel filters and difficulties in fuel injection system.

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- (f) Do not continually add new fuels to old fuels. Drain and clean tank at regular intervals at lease once in a year.
- (g) All fuel handling equipment including hands, funnels, hand pump and small containers should be kept clean at all times and covered when not in use.
- (h) While decanning Diesel fuel from barrels great care should be taken that condensation and sediments are also not poured out into the small containers. Then the condensation and sediments are drained off and thrown away.

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