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**for information**

## ***Information Paper on the Problems of Misuse of Diesel Oil***

### ***TYPES OF DIESEL OILS BEING MISUSED***

To understand the situation of this paper, readers must know the types of illegal fuel being misused by road vehicles. There are currently four kinds of fuel being misused. They are :-

- Light Diesel Oil
- Marked Oil
- Detreated Oil
- Kerosene mixture

#### **Light Diesel Oil**

2 Light diesel oil (LDO) is a kind of hydrocarbon oil commonly known as "gas oil". It is colourless and easily available at legitimate filling stations. Government duty is imposed on LDO for use as vehicle fuel.

3. Smuggled LDO is duty-not-paid and is termed "dutiable LDO". A large portion of dutiable LDO are smuggled into Hong Kong by sea route. Chinese territorial vessels and fishing boats are commonly used for conveying LDO from China. Other dutiable LDO through land route are usually brought in by cross border vehicles.

#### **Marked Oil**

4. Marked oil, also known as 'industrial diesel oil' is duty exempted LDO to which a marker and a colouring substance have been added to distinguish it from duty paid LDO. It is not permitted for use as fuel in road vehicles. It can be used in restaurants, dyeing factories and construction sites. Marked oil can be easily available from legitimate oil suppliers.

## **Detreated oil**

5. Due to the supply of illegal dutiable LDO being unable to meet the demand from drivers, illegal traders use detreated oil as substitute. They employ chemical methods to remove the red colour from the marked oil to make the oil become transparent and look similar to LDO with naked eyes. These can be done by adding concentrated sulphuric acid and caustic soda to the marked oil or through a filtration process by using industrial activated carbon. We call the decolourized oil detreated oil.

## **Kerosene mixture**

6. Kerosene sometimes is used to mix with dutiable LDO to increase the bulk. Drivers are also unable to distinguish the mixture from LDO with naked eyes.

## ***The problems***

### ***CAUSES OF THE ABUSE OF DIESEL OIL***

7. The misuse of LDO has been a long standing problem which is spiraling up and has reached an alarming level. The following are the major causes :

- (1) substantial saving for using illegal fuel;
- (2) lucrative profit by selling illegal fuel;
- (3) easy availability of illegal light diesel oil and marked oil; and
- (4) light penalties on diesel oil offenders.

## **Substantial saving for using illegal fuel**

8. LDO is available for sale in local oil stations at \$6.61 per litre of which \$2.89 being the duty levied by the government. However, illegal fuels are available at about half price of the legitimate fuel. By using illegal fuel, drivers can save \$2.6 - \$4.00 per litre. The substantial price differences are irresistible and thus many drivers and owners of vehicles dare to bear the risk to use illegal fuel.

## **Easy availability of light diesel oil and marked oil**

9. Marked oil is easily available from legitimate oil depots as there is no restriction on the possession, sale and movement of marked oil unless it is put into the fuel tank of a motor vehicle.

10. Moreover, the easy access to the illegal refilling stations has encouraged drivers to use illegal fuel. There are about 250 number of illegal oil filling stations spread over the territory.

## **Light penalties**

11. The maximum penalty in respect of dutiable LDO offences is a fine of \$1,000,000 and imprisonment for 2 years while marked oil offences carry a maximum penalty of a fine of \$200,000 and imprisonment for 2 years. Nonetheless, statistics reveal that the normal fine for a driver using illegal fuel range from \$1,000 - 2,000, while for cases involving bulk seizure, the penalty is only around \$10,000 - \$20,000. The penalty is manifestly inadequate to reflect the gravity and prevalence of the offence. The light penalties pose little deterrent effect on offenders.

## ***PROBLEMS RESULTED***

12. The following are the problems relating to environment arising from the misuse of diesel oil:

- fire hazard to the public;
- environment impact on the community;

## **Fire Risk**

13. Diesel oil is classified as Category 5 goods under the Dangerous Goods Ordinance. It is inflammable and catches fire easily if stored improperly.

## **Environment Impact on the Community**

14. Marked oil usually has a sulphur content of around 0.35% which is higher than the 0.2% limit for automotive diesel oil. The Environmental Protection Department has also taken some samples of smuggled LDO for analysis and found that these samples have a sulphur content similar to the marked oil. The use of marked oil and this smuggled LDO as automotive fuel will emit more sulphur dioxide and slightly higher respirable suspended particulates (RSP). The high level of RSP is a major concern in Hong Kong. Although engine technology is the more dominant factor in controlling the emission of RSP, the use of auto diesel with an inferior quality is definitely undesirable. Detreated oil may contain other harmful chemicals. The use of detreated oil as automotive fuel may cause not only more air pollution but also wear and tear problems to the engines.

## **Conclusion**

15. It is necessary to stop the malpractice of using illegal diesel oil as automotive fuel. The Customs and Excise Department will continue to make efforts to crack down these illegal activities. Recently, the Department has imposed two stringent measures to increase the deterrent effect. From December 1996, any vehicle, other than public vehicle, found twice using illegal fuel will be detained for subsequent forfeiture. In addition, with effect from 1 January 1997, drivers or vehicle owners who have committed offences of using illegal fuel will be fingerprinted. They will have a criminal record upon conviction.

***- End of the Paper -***

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