Council meeting of 27 March 2013

Motion on "Urging the Government to eradicate 'gutter oil' and take the lead in supporting biodiesel'

Progress Report

Purpose

At its meeting on 27 March 2013, the Legislative Council carried the motion on "Urging the Government to eradicate 'gutter oil' and take the lead in supporting biodiesel" moved by Hon Paul TSE Wai-chun as amended by Hon WONG Kwok-hing, Hon Frankie YICK Chi-ming and Hon Steven HO Chun-yin (see **Annex**). This paper reports on the Government's position and follow-up actions in respect of the motion.

Ensuring the safety of cooking oil

- 2. The Centre for Food Safety (CFS) under Food and Environmental Hygiene Department (FEHD) has all along been monitoring the quality of cooking oil in Hong Kong, in the interest of ensuring that the products comply with the legal requirements and are fit for human consumption. From January 2011 to October 2012, more than 310 cooking oil samples were tested for different chemicals under the Food Surveillance Programme. All the samples taken were found to be satisfactory and in compliance with the legal requirements.
- 3. Since 2011, there has been media coverage from time to time on the supply of "gutter oil" for use in food establishments in the Mainland. CFS has been keeping a close watch over such reports and communicating with the relevant Mainland authority. As far as we understand, the Mainland monitoring authority is still working on methods for identifying "gutter oil". Nevertheless, CFS carried out a targeted surveillance project on used cooking oil under the Food Surveillance Programme in 2012. A total of 68 samples of used cooking oil were collected from various local food establishments and tested for Benzo[a]pyrene ("BaP" for short) and other chemicals. The results of all samples taken were satisfactory. They had been announced in November 2012.
- 4. The Administration is fully aware of the public concerns that arise from a media report in December 2012 on supply of suspected substandard cooking oil. CFS has taken immediate action, which includes taking cooking oil samples for BaP tests and tracing the source and distribution of the substandard cooking oil by the food tracing mechanism under the Food Safety Ordinance (Cap 612). The relevant information has been disseminated to the public and the trade immediately to put their mind at ease. After investigation, there was no evidence that any so-called "gutter oil" was involved. Nor was there evidence that anyone had collected from food establishments for recycling used cooking oil which then reentered the food chain in Hong Kong.

There is no definition of "gutter oil". Generally, it refers to discarded oil recovered from gutters and ditches.

- 5. Nevertheless, FEHD has taken a series of extra measures to ensure the safety of cooking oil on top of the existing legislation, enforcement action and food surveillance programme. They include:
- (a) setting an action level for the carcinogenic BaP in cooking oil: After consulting the Expert Committee on Food Safety on the surveillance strategies, CFS has adopted an action level of 10 mcg/kg for BaP in cooking oil. If a BaP level at 20 mcg/kg is detected in cooking oil, risk assessment indicates a public health concern and in that case CFS would take enforcement action in accordance with Section 54 of the Public Health and Municipal Services Ordinance (Cap 132) as well as initiate a mandatory recall of the cooking oil concerned. When a BaP level higher than 10 mcg/kg but lower than 20 mcg/kg is detected in cooking oil, risk assessment suggests that the public health risk should not be high. Nevertheless, under such a scenario, CFS may still take enforcement action in accordance with Section 52 of the Public Health and Municipal Services Ordinance (Cap 132);
- (b) conducting an additional targeted food surveillance project on cooking oil: The results of the project were announced on 1 February. According to the results of the project, all samples were found to be free of metallic contaminations. As for BaP, 79 out of 102 samples were found to contain BaP, with a level ranging from 0.1 mcg/kg to 8.8 mcg/kg. These levels were all below the action level of 10 mcg/kg adopted by CFS after consulting the Expert Committee on Food Safety. In addition, seven samples were found to contain aflatoxin, with a level ranging from 1.1 mcg/kg to 5.8 mcg/kg. These levels were all below the statutory limit; and
- (c) dispatching staff to more than 1 200 premises of cooking oil importers and distributors dealing in cooking oil for inspections: So far inspections have revealed that 27 importers and distributors, who are exempted from applying for a licence, are engaged in the bottling and canning of cooking oil,. The environmental hygiene at these premises is generally satisfactory. FEHD has a permanent mechanism in place to inspect the hygiene of these premises.
- 6. We believe that the above measures can further ensure the safety of cooking oil, address public concerns, and safeguard public health.

Restrictions on Establishing a Tracing Mechanism to Regulate and Monitor the Recyclers of Local Used Cooking Oil

- 7. As for the monitoring of operation of local recyclers and the enhancement of regulation of industries associated with used cooking oil, the Government has been keeping a close eye on the development of the relevant industries. Certainly, their operation must comply with, say, the Air Pollution Control Ordinance (Cap 311) so that the production process meets the environmental protection requirements.
- 8. Nevertheless, the establishment of a tracing mechanism, as well as the collection and release of the relevant information and statistics on the recovery of local used cooking oil on a regular basis can only be implemented by legislation. Requesting the producers of used cooking oil (such as food establishments, hotels, food factories and recyclers) to meet the new legislative requirements will push up the cost and probably discourage recycling activities and the development of recycling industry. Take our existing chemical waste management measures as an example. While chemical waste producers are required to register, collectors

and recyclers are also required to obtain licences and comply with legislative requirements for the regulation of packaging, labelling, storage, collection, transportation and disposal of chemical waste. It is inevitable that the society will have to bear the cost to a certain extent.

- 9. As for whether the Government should regulate the recycling and use of used cooking oil by legislation from an environmental protection perspective, it must be pointed out that used cooking oil is not hazardous waste, and its import/export is not restricted in the mainstream international community. We all agree that the Government should support environmental protection and carbon reduction, and promote the green industry, but regulation by legislation might not be necessary from a purely environmental protection perspective.
- 10. As for food safety, the Food Safety Ordinance (Cap 612), which came into force on 1 February 2012, introduced a food tracing mechanism. This mechanism comprises a registration system for food importers and distributors. It also requires that food businessmen shall keep proper records of transactions (whereas retailers are required to keep records of stocks acquired only) with a view to enhancing food traceability and ensuring food safety. After a media report in December 2012 on supply of suspected substandard cooking oil, the CFS resorted to this tracing mechanism. Relying on the sales records kept by importers and distributors, CFS successfully traced the source and distribution of the concerned cooking oil.

Use of Biodiesel as Vehicle Fuel

- As to whether the Government should mandate the use of biodiesel as vehicle fuel, while it poses no technical problem for local vehicles to use B5 biodiesel², the cost of biodiesel might be higher than the current cost of diesel. According to the information in the first phase of the Government's pilot scheme to use B5 biodisel, the cost of B5 biodiesel was 5% to 10% higher than that of diesel. Hence, the affordability of society and of motor vehicle owners should be a major consideration. Nevertheless, as biodiesel gradually becomes more popular, the price difference between biodiesel and conventional diesel is expected to narrow. On top of this, the Government also needs to consider if a stable supply of biodiesel can be maintained in the local market.
- 12. Using biodiesel to replace diesel can minimize the emission of greenhouse gases and help to combat global warming. The Environmental Protection Department (EPD) commissioned the University of Hong Kong in 2003 to conduct a study on the feasibility of using biodiesel as local vehicle fuel. The conclusion of the study was positive. However, it pointed out that although biodiesel performed well in reducing the emissions of certain exhaust gases, doubts about biodiesel in relation to the performance of and its compatibility with motor vehicles remained to be addressed before promoting its use. Having taken into account the views of motor vehicle suppliers and the findings of the study conducted by the Japan Automobile Manufacturers Association in 2007 on the impact of biodiesel on components of in-use vehicles, EPD amended the Air Pollution Control (Motor Vehicle Fuel)

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B5 diesel means diesel containing 5% of biodiesel. B5 diesel is a kind of clean fuel, and its biodiesel part is a renewable fuel made from vegetable oil, animal fat and used cooking oil. No raw material is grown in Hong Kong to support the production of biodiesel. Currently local biodiesel producers mainly use used cooking oil as a biodiesel raw material.

Regulation (Cap311L) in 2009 to draw up, by referring to the Euro-standard, the biodiesel standard applicable to local motor vehicles, so as to ensure the quality of biodiesel.

Take the Lead in Supporting Biodiesel by the Government

- Concerning the Government's plan to use biodiesel, we have always set a good example by taking the lead in promoting green procurement. This can, on the one hand, put the concept of environmental protection in practice, and on the other hand, play an exemplary role in promoting the business sector to respond and hence driving the development of the green industry in Hong Kong. To support our policy in tackling climate change, starting from January 2012, the Government has trial used B5 diesel in heavy machineries, such as vehicles, vessels, boilers, diesel engines. This scheme covers 120 police vehicles, five vessels, four dual fuel engine generators and 12 boilers. The fuel consumption was expected to be about 3.5 million litres, accounting for some 8% of the overall Euro V diesel consumption by the Government.
- 14. The first phase of the 16-month pilot scheme has generally been operating smoothly. Biodiesel is compatible with engines of heavy machinery, and no abnormalities have been observed in government vehicles, vessels, boilers and diesel engines involved in the scheme. In view of this good result, we will pursue the second phase of the pilot scheme in mid 2013 to expand the use of B5 diesel in more government departments for two years. It is expected that seven departments (namely Correctional Services Department, Hong Kong Police Force, Drainage Services Department, Marine Department, Environmental Protection Department, Leisure and Cultural Services Department, Government Logistics Department) will participate in the scheme with an estimated total consumption of about 8 million litres in two years. The successful tenderer states that it will use B5 diesel produced at the EcoPark, and that the biodiesel part will be produced from locally recycled used cooking oil.

Support Measures for the Local Environmental Protection Industry in the Production of Biodiesel

- 15. Apart from adopting green procurement and taking the lead to use B5 diesel, the EPD has all along been helping biodiesel production companies liaise with the catering industry and organising activities to promote the recycling of used cooking oil. They aim to encourage the industry to hand over used cooking oil to the appropriate recyclers for recycling purpose so as to recycle used material into useful products and optimize the use of resources.
- 16. The Government has been taking the lead in adopting a green procurement policy to promote recycling industry and set a good example to the business sector. At present, the number of products on the Government's green procurement list has been expanded to 103 items, including B5 diesel. With respect to the pilot scheme, the suppliers all use biodiesel generated from locally recycled used cooking oil to produce B5 diesel. To promote the green procurement policy, EPD in collaboration with other departments and stakeholders will continue to organise or participate in training seminars. Relevant information on green procurement including the Government's green procurement list and the relevant training materials will continue to be disseminated through the EPD's website. We will encourage and welcome various departments and public organisations to participate in the pilot scheme for B5 diesel. We know that some public organisations and private companies have started to use biodiesel in response to the use of B5 diesel by the Government.

- 17. We have also provided long term land and ancillary facilities at the EcoPark at an affordable rent to the industry so as to promote and encourage investment in the recycling and environmental protection industries and the introduction of advanced and cost-effective technologies. Champway Technology Limited, one of the tenants at EcoPark, has built a 6 000-square metre plant where locally collected used cooking oil is recycled into biodiesel that complies with international standards.
- 18. All in all, the Government will step up efforts in supporting the development of environmental protection industry in Hong Kong through green procurement and other measures. Examples are the extension and expansion of the pilot scheme for using B5 diesel, and the provision of affordable and long term land, and ancillary facilities at the EcoPark to the industry.

Environment Bureau Food and Health Bureau June 2013

Motion on "Urging the Government to eradicate 'gutter oil' and take the lead in supporting biodiesel" to be moved by Hon Paul TSE at the Council meeting of 27 March 2013

Motion as amended by Hon WONG Kwok-hing, Hon Frankie YICK and Hon Steven HO

That late last year, a suspected incident of 'gutter oil' occurred in Hong Kong, and although it turned out only to be a false alarm after investigation and verification, it had already aroused public concern; this Council urges the SAR Government to prompt various government departments and public organisations consuming large quantities of diesel to take the lead in using biodiesel (B5) generated from used cooking oil recollected from food establishments in Hong Kong, and establish a tracing mechanism to regulate and monitor the operation of local used cooking oil recyclers, and collect and regularly release the relevant information and statistics about the local recycling of used cooking oil to facilitate source tracing and follow-up action in the event of occurrence of incidents, so as to effectively eradicate the source material of 'gutter oil', ensure the safety of cooking oil, and encourage and take practical actions to support local environmental protection industry on biodiesel; this Council also urges the SAR Government to assist the relevant recycling industries in establishing a comprehensive recycling system to ensure that used cooking oil generated locally can be used in local recycling industries as far as possible, and encourage the construction, commercial and industrial sectors to use biodiesel.