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Report of the Subcommittee on Pesticide Residues in Food Regulation

Purpose

This paper reports on the deliberations of the Subcommittee on Pesticide Residues in Food Regulation.

Background

2. At present, the import, manufacture, sale and supply of pesticides in Hong Kong are regulated by the Pesticides Ordinance (Cap. 133). The Agriculture, Fisheries and Conservation Department is responsible for enforcing the relevant provisions. All pesticides intended for sale in Hong Kong must be registered with the Director of Agriculture, Fisheries and Conservation ("DAFC"). Except with a licence issued by DAFC, no person shall import, manufacture, sell or supply registered pesticides. While there are general provisions under the Public Health and Municipal Services Ordinance (Cap. 132) ("PHMSO") that all food on sale for human consumption must be wholesome, unadulterated and fit for human consumption, there is currently no specific legal provision that regulates the level of pesticide residues in food.

3. According to the Administration, the Centre for Food Safety ("CFS") operates a food surveillance programme and regularly takes food samples to test, among others, for pesticide residues following the testing methods and standards recommended by the Codex Alimentarius Commission ("Codex"). However, the lack of a specific legal provision governing pesticide residues in food means that a case-by-case assessment need to be made in order to substantiate that the concerned food sample is unfit for human consumption before CFS can prosecute the food trader concerned. This also deviates from the general principle that pesticide use should be kept at a minimum possible level as recognized by Codex

and developed countries. The introduction of specific regulation on pesticide residues in food is therefore considered necessary.

Pesticide Residues in Food Regulation (L.N. 73 of 2012)

4. Section 55(1) of PHMSO provides that the appropriate authority, i.e. the Director of Food and Environmental Hygiene ("DFEH") may make regulations to prohibit or regulate the addition of any specified substance to food intended for sale for human consumption. The Regulation is made by DFEH pursuant to that section.

5. According to the Administration, the Regulation aims to achieve the following objectives -

- (a) better protect public health;
- (b) facilitate effective regulation of pesticide residues in food; and
- (c) promote harmonization between local and international standards.

6. The Regulation will come into operation on 1 August 2014.

The Subcommittee

7. At the House Committee meeting on 11 May 2012, Members formed a subcommittee to study the Regulation in detail. The membership list of the Subcommittee is in **Appendix I**.

8. Under the chairmanship of Hon Fred LI Wah-ming, the Subcommittee has held three meetings with the Administration, and met with the organizations listed in **Appendix II**.

9. To allow more time for the Subcommittee to study the Regulation in detail, the Subcommittee Chairman has given notice to move a motion at the Council meeting of 30 May 2012 to extend the scrutiny period of the Regulation to 27 June 2012. However, the motion had not been dealt with at the Council meeting of 30 May or 6 June 2012, and the deadline for amending the Regulation expired on 6 June 2012.

Deliberations of the Subcommittee

Schedules 1 and 2 to the Regulation

List of maximum residue limits and extraneous maximum residue limits

10. The Subcommittee notes that Schedule 1 to the Regulation specifies a list of maximum residue limits ("MRLs") and extraneous maximum residue limits ("EMRLs") for certain pesticide-food pairs. The presence of any of these residues in food at levels exceeding the MRLs/EMRLs is not permitted and food that contains such residues must not be imported, consigned, delivered, manufactured or sold for human consumption under the Regulation. The Subcommittee has enquired about the definitions of MRL and EMRL, as the two terms are not substantially defined in the Regulation but rather like signposts which helps readers to locate an MRL/EMRL as appropriate. The Subcommittee is also concerned as to how the list of MRLs/EMRLs is formulated.

11. According to the Administration, MRL and EMRL are common terminologies widely used and well understood by international communities, including Codex, the international food standard setting authority, regulatory authorities and the food trade. Codex defines MRL as the maximum concentration of a pesticide residue recommended by Codex to be legally permitted in or on food and agricultural commodities. Codex defines EMRL as referring to a pesticide residue or a contaminant arising from environmental sources (including former agricultural uses) other than the use of a pesticide or contaminant substance directly or indirectly on the commodity. It is the maximum concentration of a pesticide residue or contaminant that is recommended by Codex to be legally permitted or recognized as acceptable in or on food and agricultural commodities. Codex has established EMRLs mainly for pesticides that are no longer in use but persistent in the environment. The pesticides with EMRLs in Part 2 of Schedule 1 to the Regulation fall under this category.

12. On the formulation of the list of MRLs/EMRLs, the Administration has advised members that it is based primarily on the available standards recommended by Codex (around 2 800 MRLs/EMRLs), supplemented by standards of the Mainland (around 800 MRLs) and other major food exporting countries to Hong Kong, including the United States and Thailand (around 3 200 MRLs/EMRLs). The Administration has also taken into account the comments received during public consultation conducted in 2011 and included around 300 MRLs/EMRLs in the list. All standards set out in Schedule 1 have been scrutinized by CFS by conducting risk assessment to ensure that they are

adequate to protect public health in Hong Kong. The scope of risk assessment includes acute and chronic toxicity, carcinogenicity, reproductive and developmental toxicity, i.e. short-term and long-term assessment of dietary exposure to pesticide residues. Chronic toxicological assessment includes life-time dietary exposure to pesticide residues from childhood to old age. Taking into account the heavy reliance of Hong Kong on imported food, such an approach will strike a balance between protecting public health and maintaining a stable supply of food in Hong Kong.

13. The Administration has informed members that CFS has consulted the trade at early stage during the formulation of the list of MRLs/EMRLs. The list in its preliminary draft was first uploaded to the website of CFS for comments by the trade in March 2011. Traders were encouraged to express views on the list on different occasions including regular technical meetings between CFS and the trade as well as during the public consultation from July to September 2011. CFS briefed the trade at a meeting on 30 March 2012 on the revised list of MRLs/EMRLs which has incorporated the latest standards of Codex, the Mainland, the United States and Thailand, and suggestions received during consultation. The trade noted the updates and had no further comments.

14. Some members are concerned whether the views received during the public consultation on the draft lists of MRLs and EMRLs have been accepted and the reasons for those not being accepted.

15. According to the Administration, around 1 000 suggestions on pesticide residue limits were received during public consultation. Among them, around 600 suggested limits were not accepted mainly due to technical reasons such as the pesticide residue definition being different from the relevant residue definition adopted in Schedule 1, or because the proposed limit could not pass risk assessment.

16. The Subcommittee notes the concern of Greenpeace that certain MRLs in Schedule 1 to the Regulation are more lenient than the relevant limits in other places such as the European Union. The Administration has pointed out that the degree of degrading of the same pesticide could vary to a large extent in different places under different climates. Different supplying countries would, taking into account the types of crops and the corresponding pest problems and practical situations in their countries, formulate different pesticide residue limits following good agricultural practices and approve the use of registered pesticides. The standards of the European Union are formulated based on its own agricultural situation and may not be applicable to situations in other places.

Exempted pesticides

17. The Subcommittee has queried how the list of exempted pesticides specified in Schedule 2 to the Regulation is drawn up. According to the Administration, the list of exempted pesticides in Schedule 2 is to facilitate the use of pesticides by the trade that are natural and the residues of which are identical to or indistinguishable from natural food components. In determining whether a pesticide should be included in Schedule 2, DFEH will take into account relevant factors including the following -

- (a) whether the use of the pesticide will result in residues occurring in food;
- (b) whether the residues of the pesticide are identical to or indistinguishable from natural food consumption; and
- (c) whether the residues of the pesticide have any toxicological significance or will be dangerous or prejudicial to human health.

Such a list of exempted pesticides is not available from Codex. However, in drawing up the list, the Administration has made reference to the lists adopted by major food exporting countries and places to Hong Kong, including the Mainland, the United States and Thailand.

Updates on Schedules 1 and 2

18. The Subcommittee notes from the Administration that it has advised trade members that as new pesticides and new applications on crops keep emerging, the lists of MRLs/EMRLs and exempted pesticides respectively in Schedules 1 and 2 to the Regulation will be updated by DFEH regularly. To this end, traders are welcomed to make proposals accompanied by sufficient supporting information to DFEH for consideration. DFEH may incorporate the proposals received in the next updating exercise of Schedules 1 and 2, taking into account the latest international developments, consistency with the existing list, availability of relevant supporting information and reference materials for testing, and whether the limits concerned could pass risk assessment.

Tests on pesticide residues

19. The Subcommittee has sought information on how tests on pesticide residue in food are conducted. According to the Administration, CFS will collect food samples for testing of pesticide residues as part of its regular food

surveillance programme. Under the risk-based food surveillance programme, samples at import, wholesale and retail levels will be taken for chemical (including pesticide residues) and microbiological testing to ensure that all food comply with local legislative requirements and are fit for human consumption. At present, CFS announces all food surveillance results, including the types of unsatisfactory food samples and testing results, via monthly press releases and food safety reports published on its website. CFS will also offer relevant food safety information and advice to consumers. In addition, if the testing results show that the food may pose immediate threat to human health, CFS will immediately issue press release to remind the general public not to consume such types of food, so as to minimize public health risks.

20. Some members have expressed concern about the testing services on pesticide residues in vegetables and the relevant costs to be incurred by food traders. The Subcommittee has sought information on the testing services provided by the Vegetable Marketing Organization ("VMO"), and the follow-up actions taken by VMO and the Administration should the test results indicate the presence of pesticide residues.

21. According to the Administration, VMO is a non-profit making organization, providing trading facilities, pesticide residue testing and accounting services to vegetable wholesalers and buyers. VMO obtains its operational funding by collecting commission from the transaction value of vegetables wholesaled thereat. Apart from vegetable wholesale, VMO has set up a pesticide residue testing laboratory to ensure that vegetables marketed through it are wholesome and safe. On average, around 220 to 250 vegetable samples, including vegetables locally produced and those imported from the Mainland, are handled by the laboratory daily. The testing cost is fully borne by VMO with no extra charge on vegetable wholesalers. According to VMO, the total cost of pesticide residue testing from April 2011 to March 2012 was around \$2.3 million.

22. The Administration has informed members that if any test result shows the presence of residues of highly toxic pesticides or excessive level of pesticide residues, VMO will immediately advise the wholesaler concerned to stop selling the vegetable in question and issue a warning letter reminding the wholesaler that the supplying farm must adhere to the principle of safe and proper use of pesticides in vegetable production. VMO will refer suspected cases to the Food and Environmental Hygiene Department for follow-up actions and step up monitoring and testing of vegetables of the wholesaler concerned.

Penalty for contravening the Regulation

23. The Subcommittee notes that under the Regulation, unless the pesticide used on a type of food is exempted, only food containing pesticide residues which do not exceed any of the permitted levels specified in Schedule 1 for that food is allowed to be imported and sold. For food containing residue of any pesticide that is neither exempted nor specified in the Regulation, the import and sale of the food concerned is only allowed if consumption of the food is not dangerous or prejudicial to health. A maximum fine at level 5 (\$50,000) and imprisonment of six months may be imposed on any contravention. Some members have expressed concern that local farmers may unwittingly contravene the Regulations, and queried whether defence is available.

24. The Administration has explained that section 71 of PHMSO stipulates the conditions under which warranty may be pleaded by the defendant as defence in any proceedings for an offence under the relevant part of the Ordinance. This would also be applicable to the offences under the Regulation. For example, a vendor charged under the Regulation may produce evidence such as invoices to demonstrate that the food concerned is in the original state as obtained from the supplier without any further treatment and the supplier's earlier confirmation of safe food supply. In addition, section 70 of PHMSO provides that if the defendant could prove that the contravention was due to the act or default of some other person, and that he has exercised all due diligence to secure that the provisions in question were complied with, he may plead this as a defence. This is also applicable to offences under the Regulation.

Grace period

25. The Subcommittee has queried about the need for a grace period of about two years prior to the commencement of the Regulation on 1 August 2014. According to the Administration the grace period is proposed after taking into account the need for timely implementation of the Regulation and the preparation required by the trade. The Regulation affects a wide range of stakeholders including food manufacturers, food importers, food distributors, retailers, local farmers, private laboratories and pesticide suppliers. During earlier consultation, the trade has indicated that a sufficient period of time would be required for the following major preparatory work -

(a) to familiarize themselves with the Regulation which is new and highly technical, including how to determine MRLs/EMRLs for different food commodities by applying the relevant sections and Schedule 1 to the Regulation as well as by making reference to the food classification system of Codex;

- (b) to liaise with food suppliers to ensure that the food commodities they are dealing with could meet the standards under the Regulation. If necessary, some food traders may have to switch to suppliers who are reputable and able to provide documentary proof on compliance with the Regulation; and
- (c) to allow sufficient time for private laboratories which provide testing services for pesticide residues in food in Hong Kong to acquire the necessary facilities, enhance their testing capability and develop suitable testing methods.

26. In the Administration's view, the proposed two-year grace period, which is supported by trade members, is necessary for relevant stakeholders to prepare for the commencement of the Regulation and to avoid any unintended impact on food supply. During the grace period, CFS will provide briefings, training and guidelines for different sectors to familiarize them with the Regulation. The Government Laboratory will also provide technical assistance to private laboratories.

27. The Subcommittee has urged the Administration to enhance the publicity of the Regulation during the grace period in order for the stakeholders to better understand the requirements in the Regulation.

Other related issue

28. The Subcommittee notes the testing results of pesticide residues in vegetable samples collected from three local supermarkets between February and March 2012 provided by Greenpeace, and sought information on the follow-up actions taken by the Administration.

29. According to the Administration, since the public statement made by Greenpeace in May 2012, CFS has studied the testing results provided by Greenpeace in detail. As CFS did not have the vegetable samples tested by the Greenpeace for verification, CFS could only analyse the data provided by the Greenpeace which could not be used as evidence for enforcement actions. According to information provided by Greenpeace, some samples may contravene the standards stipulated in the Regulation or pose long-term health risks. Accordingly, CFS has worked with retailers concerned and the Mainland authorities to trace the sources and collect follow-up samples from relevant retailers for testing. All follow-up samples collected are satisfactory. CFS has

reminded the retailers concerned of the safety of food products sold and the requirements under the Regulation that would come into force in future. In addition, CFS is arranging with the Mainland authorities to inspect the relevant registered vegetable farms for exporting vegatables to Hong Kong.

30. Hon Tommy CHEUNG considers that it is more appropriate if Greenpeace had reserved a portion of its samples for CFS to conduct the necessary testing for verification purpose.

Council Business Division 2 Legislative Council Secretariat 27 June 2012

Subcommittee on Pesticide Residues in Food Regulation

Membership list

Chairman	Hon Fred LI Wah-ming, SBS, JP
Members	Hon WONG Yung-kan, SBS, JP Hon Tommy CHEUNG Yu-yan, SBS, JP Hon KAM Nai-wai, MH (Total : 4 Members)
Clerk	Mrs Sharon TONG
Legal Adviser	Miss Evelyn LEE
Date	22 May 2012

Appendix II

Subcommittee on Pesticide Residues in Food Regulation

Organizations which have given oral representation to the Subcommittee

- 1. The Federation of Vegetable Marketing Co-operative Societies, Ltd.
- 2. Greenpeace
- 3. The Hong Kong Food Council
- 4. 616.hk
- 5. The Merchants Association of First Wholesalers/Jobbery of Imported Fresh Fruits & Vegetables Limited