Executive Summary

Direct Investigation into Food and Environmental Hygiene Department's System of Safety Control for Imported Fruits and Vegetables

Introduction

Fruits and vegetables are commonly consumed in Hong Kong and most of them are imported. Given its impact on public health, food safety must not be overlooked. This direct investigation serves to examine whether there is any inadequacy in the Food and Environmental Hygiene Department ("FEHD")'s system of safety control for imported fruits and vegetables, in particular, whether there are deficiencies in the Department's gatekeeping efforts at the point of arrival of imported fruits and vegetables in Hong Kong, with a view to making recommendations for improvement.

Our Findings

The Current System

Relevant Legislation

- 2. The main ordinances governing imported food include the Public Health and Municipal Services Ordinance ("PHMSO") and the Food Safety Ordinance ("FSO"). Both are enforced by FEHD.
- 3. By virtue of PHMSO, the Government has drawn up the Pesticide Residues in Food Regulation ("PRFR"), which stipulates the chemical standards for the composition of food, as well as the Food Adulteration (Metallic Contamination) Regulations ("FAMCR"), which regulate the levels of metals present in food.
- 4. PHMSO empowers FEHD to take samples of food for laboratory tests to ensure their compliance with the statutory safety standards. The Department can prosecute the supplier(s) of unsafe food.
- 5. FSO confers power on the Director of Food and Environmental Hygiene to make an order to prohibit the import and/or supply of any food for the period specified in the order, and/or direct that any food supplied be recalled and destroyed.

Safety Control for Imported Fruits and Vegetables

6. According to FEHD's risk assessments, fruits and vegetables are not considered high-risk foods. Hence, prior permission of the Department is not required for importing them into the territory.

- 7. The Centre for Food Safety ("CFS") under FEHD takes samples of fruits and vegetables at the point of their arrival in Hong Kong and at the wholesale and retail stages. A risk-based principle is adopted in determining the types of samples to be collected, the frequency of sampling, the number of samples to be taken and the types of laboratory analysis to be conducted. CFS devises a "Food Surveillance Programme" annually, taking into account past food surveillance results, local and overseas food incidents and the relevant food risk analyses.
- 8. After a "Food Surveillance Programme" is endorsed, the relevant units of CFS would meet regularly to discuss details of the sampling checks and the scope of sampling. Having consulted the Government Laboratory ("Govt Lab"), CFS would draw up an annual sampling plan, setting out the pesticide residues/heavy metals on which all work units must conduct sampling checks each week. The plan also includes a checklist of the fruits and vegetables that are likely to be tainted with such pesticide residues/heavy metals.
- 9. Fruits and vegetables imported by sea, land and air are subject to sampling checks by CFS officers at the point of their arrival in Hong Kong and at the wholesale and retail stages. This direct investigation focuses on CFS's procedures of sampling fruits and vegetables at the point of their arrival.
- 10. Sampling checks on fruits and vegetables upon arrival in Hong Kong are conducted by CFS at Kwai Chung Food Control Checkpoint ("Kwai Chung Checkpoint", for those imported by sea), Man Kam To Food Control Office ("Man Kam To Office", for those imported by land) and the Airport Office (for those imported by air). Samples taken by CFS officers at the above locations are sent to Govt Lab or Man Kam To Food Laboratory (exclusively for samples taken at Man Kam To Office) for laboratory tests.

"Maximum Residue Limits" of Pesticide

- 11. Regarding food safety standards, Schedule 1 to PRFR contains a list of about 400 food types (including "food groups", "food subgroups" and "specific food") and 360 types of pesticides, and specifies the "maximum residue limits" ("MRLs") for over 7,000 pesticide-food pairs. For pesticides, PRFR mainly adopts MRLs established by the Codex Alimentarius Commission ("Codex"), supplemented by standards set by other major food importing countries and regions (such as Mainland China, Thailand and the United States).
- 12. A supplier of food that contains pesticide residues exceeding MRLs specified in the aforementioned Schedule 1 commits an offence and may be prosecuted by FEHD.

Food Types and "Pesticide-food Pairs" outside Schedule 1

13. For any food types and "pesticide-food pairs" not covered by Schedule 1, FEHD would consider a number of factors (including the nature of the pesticide, the mode of

consumption of the food in question, and information provided by international food or hygiene authorities) in conducting risk assessments. The assessments are based on "safe reference values", such as "acceptable daily intake" (i.e. the estimated amount of a certain chemical in food or drinking water that can be ingested daily over a lifetime without appreciable health risk to the consumer) or "acute reference dose" (i.e. the amount of a substance that can be ingested over a short period of time without appreciable health risk to the consumer). Should the result of an assessment show that consumption of the food in question is dangerous or harmful to health, FEHD would consider prosecuting the food supplier.

Our Observations and Comments

- 14. Fruits and vegetables sold in Hong Kong are of great variety and quantity, and hence extensive inspections are not practicable. However, since fruits and vegetables are so commonly consumed and most of them are imports, the public greatly relies on strict gatekeeping by the Government through its establishing and implementing an effective surveillance as well as checking system to ensure that imported fruits and vegetables pose no health risk.
- 15. This Office has found the following inadequacies with regard to FEHD's regulation and surveillance of imported fruits and vegetables.

(1) <u>Inspection and Enforcement Management</u>

Inspection of fruits at Man Kam To Office too lax; sampling checks on vegetables ineffective

- 16. Unlike lorries importing vegetables, few lorries importing fruits from the Mainland enter Man Kam To Office to allow the fruits to be inspected when they arrive in Hong Kong. To plug this loophole, we consider that FEHD should make greater efforts to subject more fruit lorries to inspection at Man Kam To Office.
- 17. Our onsite observations revealed that with regard to the sampling check procedures, there was a heavy flow of lorries with vegetables driving through Man Kam To Office. To minimise the duration of stay of the lorries at the Office for inspection, the officers there conducted their sampling at a very hasty pace, and the workers of FEHD's contractor just took out several crates of vegetables from close to the doors of the storage compartments of the lorries for inspection. As a result, those vegetables at the inner part of the storage compartments could easily evade inspection. We consider that FEHD should issue guidelines instructing its officers how to carry out effective sampling on fruits and vegetables at inner parts of storage compartments of lorries, so as to reduce the chance of problematic fruits and vegetables evading the sampling checks.

No routine checks on fruits and vegetables imported by sea and surveillance inadequate

- At present, for fruits and vegetables imported by sea, FEHD does not conduct 18. routine checks at Kwai Chung Checkpoint or at importers' warehouses/cold storages. Samples would only be taken for laboratory tests where there is a special need to do so (e.g. on receipt of intelligence and information about food safety incidents in nearby Rather, the Department chiefly takes samples at wholesale and retail outlets However, such samples actually cover fruits and vegetables imported by sea, land and air. This shows that FEHD does not have fruits and vegetables imported by sea as a specific target for checking. FEHD's system of sampling checks on fruits and vegetables imported by sea is clearly rather lax compared with those for fruits and vegetables imported by air and land. As a result, most of the fruits and vegetables imported by sea would have already entered the market for public consumption before having undergone any inspection. This situation is undesirable. The saving grace is that after our commencement of investigation, FEHD has started a trial scheme in the recent months to conduct sampling of fruits and vegetables imported by sea at importers' warehouses/cold storages. That has at least provided some additional safeguard for public health.
- 19. We hope that FEHD will develop the aforementioned trial scheme into a regular mechanism and take more samples of fruits and vegetables imported by sea at importers' warehouses/cold storages in order to strengthen its surveillance of such fruits and vegetables at the point of their arrival in the territory.
- 20. Moreover, while fruits and vegetables at wholesale outlets may be imported by sea, land or air, we believe that it should not be difficult to tell which of them are actually imported by sea, for example, those that are cheaper, more bulky and are imported from Southeast Asian countires. Given that the existing surveillance of fruits and vegetables imported by sea is less stringent, FEHD when conducting sampling at wholesale outlets may as well focus on those fruits and vegetables believed to be imported by sea. This will help further remedy the inadequacy of inspection at Kwai Chung Checkpoint.

Lengthy process from sending samples to Govt Lab to completion of laboratory tests

21. We find it crucial that results of laboratory tests on food samples are made available quickly. In case any food sample is thus found to be below the standards, CFS staff can promptly try to stop the fruits and vegetables of the same batch from going into the market, and those already in the market can be removed, recalled or destroyed as soon as possible so that such problematic food will not be sold to the public. At present, test results of only samples taken at Man Kam To or collected in case of emergencies or in light of food incidents in other locations can be made available within two working days. In all other cases, it generally takes 19 working days from sending samples to Govt Lab to the release of test results. Meanwhile, many fruits and vegetables from the same batch may have been sold in the market.

22. We understand that delivery of food samples and the testing process take time. However, to minimise the public's anxiety over consumption of problematic fruits and vegetables, we expect FEHD to work with Govt Lab to speed up the testing of food samples as far as possible, so that there would be no need to wait for 19 working days every time. An ultimate solution would be for FEHD to explore with Govt Lab the possibility of putting more resources (including manpower, machinery, space, etc) to speed up laboratory tests on food samples.

(2) Statutory standards

Absence of clear regulatory standards for some commonly consumed vegetables in Hong Kong

- 23. At present, CFS adopts two methods in regulating pesticide residues in food: one is to specify MRLs for various types of food in Schedule 1 to PRFR, and the other is to conduct "risk assessments". We believe that both methods have scientific justifications. Nevertheless, compared with the first method, the results of "risk assessments" carry more uncertainties because various factors have to be considered for each and every assessment. For example, lotus roots and bean sprouts, two commonly consumed vegetables, have yet to be listed on Schedule 1 along with MRLs of pesticide. They can only be regulated through "risk assessments", and this may affect the degree of protection of public health.
- 24. According to FEHD, Codex has recently categorised lotus roots and bean sprouts under "root and tuber vegetables" and "leafy vegetables" respectively in July 2017. CFS would need to conduct further study and seek expert advice before deciding whether it would follow Codex's latest categorisation of lotus roots and bean sprouts and amend PRFR by putting those two types of vegetables under its regulation. We consider that FEHD should making such legislative amendment as soon as possible so as to include lotus roots and bean sprouts in Schedule 1 for proper regulation.
- 25. Furthermore, to enhance food safety for the public and provide clearer instructions to the farming practices of the trade, we consider that FEHD, being the gatekeeper of food safety, should be more flexible than just adopting Codex's food categories. FEHD should extend the scope of regulation under Schedule 1 to PRFR, which serves to set clear standards for the public and the trade. For instance, FEHD should consider setting MRLs for pesticides and metallic contaminants for fruits and vegetables commonly consumed in Hong Kong based on the items and standards of food regulation adopted by Mainland authorities for food safety control as well as the latest categorisation of food in countries/regions from which fruits and vegetables are imported into Hong Kong. These should then be included in the Schedules to the respective laws for enforcement and regulation.

Lax and seriously outdated statutory standards for food safety

- 26. We notice that regulation of metallic contaminants was imposed and set out in Schedule 2 to FAMCR in as early as 1997, and for 20 years has not been updated to keep up with the times. Take "lead" as an example, Codex has set the maximum limit of "lead" in leafy vegetables at 0.3 mg per kg of vegetables while under Hong Kong laws the maximum limit is 6 mg per kg. CFS has not followed Codex's standards and the Centre's existing standard is 20 times more lenient than Codex's.
- 27. The saving grace is that, the Government has recently proposed legislative amendments in accordance with Codex's standards. Hopefully, there will be more stringent regulation of the content of "lead" in leafy vegetables.

Recommendations

- 28. Based on the above analysis, The Ombudsman urges FEHD to:
 - (1) collect more samples of fruits at Man Kam To Office for testing;
 - (2) issue guidelines instructing officers how to conduct more effective collection of samples of fruits and vegetables in storage compartments of lorries (including those placed deep inside) in order to reduce the chance of problematic fruits and vegetables evading sampling checks;
 - (3) collect more samples of fruits imported by sea at importers' warehouses/cold storages;
 - (4) when conducting sampling at wholesale outlets, focus on those fruits and vegetables believed to be imported by sea, so as to further remedy the inadequacy of inspection at Kwai Chung Checkpoint;
 - (5) where feasible, try to minimise the time for sending samples of fruits and vegetables to Govt Lab and discuss with the latter the possibility of putting more resources (including manpower, machinery, space, etc) to speed up laboratory tests on food samples;
 - (6) include lotus roots and bean sprouts in Schedule 1 to PRFR as soon as possible based on Codex's categorisation of those two types of vegetables;
 - (7) adopt Codex's existing standards for the content of "lead" in leafy vegetables and amend FAMCR as soon as possible to better safeguard public health in Hong Kong; and

(8) continue to strive to extend the scope of regulation under the Schedules to the relevant laws in order to cover more local food categories, by drawing reference, for example, from the requirements of Mainland authorities on food safety surveillance and the latest categorisation of food in countries/regions from which vegetables and fruits are imported into Hong Kong, and setting MRLs for pesticides and metallic contaminants in any fruits and vegetables commonly consumed in Hong Kong for inclusion in the Schedules to the relevant laws for enforcement and regulation.

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