For discussion on 8 November 2016

LegCo Panel on Food Safety and Environmental Hygiene

Incident of Hairy Crabs Detected with Dioxins

Purpose

On 1 November 2016, the Centre for Food Safety (CFS) of the Food and Environmental Hygiene Department suspended the import into and sale within Hong Kong of hairy crabs from two aquaculture farms in Jiangsu Province the samples of which were found to contain an excessive level of dioxins and dioxin-like polychlorinated biphenyls (PCBs).¹ This note informs Members of the incident and the follow up that is still ongoing.

Seasonal Food Surveillance & the Incident

2. CFS adopts the World Health Organization (WHO)'s "from farm to table" strategy to safeguard food safety in Hong Kong. Control at source includes allowing only food from registered farms / processing plants with audit inspections to enter Hong Kong, and requiring health certificates for certain food animals and food products, etc. At the downstream of the food supply chain, the food surveillance programme is an essential component of our food safety regime to ensure food safety.

3. Complementing day-to-day surveillance of food items based on a risk-based principle taking into account past surveillance results, local and overseas food incidents, and relevant risk analyses etc., CFS also conducts

¹ Dioxins are a group of chemical compounds which are persistent environmental pollutants and highly toxic. They can cause reproductive and developmental problems, damage the immune system, interfere with hormones, and cause cancer. The International Agency for Research on Cancer has classified dioxins and dioxin-like PCBs as human carcinogens. Dioxins arise either naturally or as by-products of industrial activities, e.g. metal smelting, molding or burning of chlorine-containing organic chemicals such as plastics. Dioxins are fat-soluble and not easily broken down which tend to accumulate in fatty tissues and along the food chain.

surveillance of food items on a project basis. Examples include the testing of radioactive levels in foods from Japan in the wake of the nuclear power plant incident in Fukushima, Japan in 2011, and the seasonal food surveillance programme. In respect of the latter, we sample for testing, for example, moon cakes in the run-up to the Mid-Autumn Festival and hairy crabs when autumn approaches.

4. Section 54 of the Public Health and Municipal Service Ordinance, Cap 132 requires that foods for sale and are intended for human consumption should be fit for human consumption. Dioxins are ubiquitous in the environment. At present, the Codex Alimentarius Commission (Codex) has not recommended any standards on dioxins and dioxin-like PCBs in foods. While the limit on the level of dioxins and dioxin-like PCBs in foods has not been set out in our food safety legislation, considering international practices and local dietary habits (i.e. edible portions of crabs including brown meat and white meat² are generally consumed), CFS currently adopts an action level of 6.5 picograms (pg) toxic equivalent per gram (6.5 parts per trillion) of the food sample (wet weight) for dioxins and dioxin-like PCBs in edible portion of hairy crabs for the purpose of food surveillance in 2016. We would continue to keep in view the monitoring and regulatory arrangements and measures over dioxins in food in the international arena, and continue to review and optimize our measures and work in this regard.

5. In late September 2016, under the seasonal food surveillance programme, a total of five hairy crab samples (a total weight of about 12 kilograms) were collected for tests on dioxins and dioxin-like PCBs. The tests were carried out by the Government Laboratory (GL). Given that the testing of dioxins and dioxin-like PCBs involves very complicated process and high degree of precision³, the test results were not available until 31 October 2016. Test results of three samples were satisfactory. However, two of the

² Brown meat includes gonads, livers and digestive glands whereas white meat includes muscle meat from appendages of the crabs.

³ The analysis of dioxins and dioxin-like PCBs involves very complicated process and high degree of precision, including extraction, multiple clean up steps, instrumental analysis and substantial data analysis. To ensure the accuracy of the analytical result, re-examination will have to be conducted as and when necessary. Also, given that the analytical procedures require high precision work, the work has to be carried out by experienced laboratory personnel and designated laboratory with controlled environment. In view of the above, it normally takes about 2 to 4 weeks for the analysis of dioxins and dioxin-like PCBs.

samples were found to contain dioxins and dioxin-like PCBs at a total level exceeding the CFS' action level.

6. According to the information in the Health Certificates, the concerned hairy crabs were from two aquaculture farms in Jiangsu Province, namely "吳江萬頃太湖蟹養殖有限公司" and "江蘇太湖水產有限公司". To safeguard public health, CFS suspended the import into and sale within Hong Kong of the hairy crabs from the two aquaculture farms concerned with immediate effect from 1 November 2016. In practical terms, this involves informing the local importers concerned of the irregularity and instructing them to remove the affected products from shelves, stop sale and initiate a recall. Also, CFS notified the relevant authorities in the Mainland of the testing results and its decision to suspend the imports of hairy crabs from the two aquaculture farms concerned.

7. As part of the follow up, CFS has stepped up surveillance against hairy crabs at the import and retail levels. Since 2 November 2016, CFS has submitted 12 hairy crab samples to GL for testing of dioxins and dioxin-like PCBs. Test results are expected to be available within two weeks after the samples are submitted for testing.

Import of Hairy Crabs & Health Certificate Requirement

8. Most of the food consumed by Hong Kong is imported. Where to import is entirely a market decision. Our supply sources are diverse though due to geographical proximity, the Mainland is our largest source of food supply especially with respect to food items with a premium on freshness.⁴ Take hairy crabs as an example, prior to 2016, there were hairy crabs imported to Hong Kong from the Netherlands in addition to the Mainland.

9. The Government's role is to ensure that foods being offered for sale in Hong Kong are safe. Hence, measures at strategic points of the supply

⁴ The Mainland has undertaken to source exports of vegetables, poultry, game, live food animals and seafood to Hong Kong from only registered farms approved by the General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China. This constitutes a welcome additional measure, having regard to the immensity of, and the numerous potential suppliers in, the Mainland. Other sources of import have not made such undertaking to Hong Kong.

chain within Hong Kong's jurisdiction have been put in place to safeguard food safety, with sampling of food for testing at the import, wholesale and retail levels being an essential and key component. Nevertheless, in respect of certain high risk food items, import measures are required. Examples include requiring that the import of live food animals such as poultry, pig, cattle and hairy crabs are subject to a Health Certificate issued by the exporting authorities, irrespective of the source of imports (be they the Mainland, the USA, Europe, Australia, Japan, etc.).

10. Due to consideration of jurisdictional remits, it is an established international practice that while the importing authorities may require certain food imports to be accompanied by a Health Certificate and may negotiate with the authorities of the exporting country/place on the requirements to be satisfied and the format of the Health Certificate, oversight of the Health Certificate arrangement is the prerogative of the relevant authorities of the exporting country/place. This is natural not only for consideration of legal/enforcement jurisdiction, but also necessary in practical terms. The supply chain in the exporting country/places seldom involves just one trading entity and may comprise complex webs of business relationships that are much affected by the economic structure and culture of the exporting countries/places.

11. Therefore, while Health Certificate and other control at source measures are important, the importance of surveillance and enforcement within Hong Kong's borders cannot be over-emphasised. In a way, the discovery from time to time of food items that breach the standards prescribed in the various food safety ordinances and regulations or are considered not fit for human consumption illustrates that our food safety control regime is functioning. Indeed, no control system is perfect especially under an ever evolving market situation. Hence, we take the opportunity of every incident to consider if any features of our regulatory regime should and can be enhanced.

Allegations of the Traders of Hairy Crabs in Hong Kong

12. Some traders whose hairy crabs are subject to the suspension on the import into and sale of hairy crabs from the aquaculture farm of "江蘇太湖水

產有限公司" were of the view that their hairy crabs had been off-shelved and recalled unfairly. According to those traders, notwithstanding that the Health Certificates showed that they had imported hairy crabs from the aquaculture farm of "江蘇太湖水產有限公司", they run their own aquaculture farms and the hairy crabs on sale in their shops were from their own farms, not the aquaculture farm of "江蘇太湖水產有限公司". Upon clarification by the Mainland inspection and quarantine authorities, the allegations of these traders are not correct. These traders have only obtained the qualification of running registered transit farms for exporting hairy crabs. According to the Mainland law, the hairy crabs of the registered transit farms must come from aquaculture farms registered by the relevant Mainland authorities. In this particular case, "江蘇太湖水產有限公司" is the legitimate aquaculture farm. While these traders alleged that they run their own aquaculture farms, the fact is that there is only a procurement contract between the traders concerned and the aquaculture farm of "江蘇太湖水產有限公司". That means a portion of the hairy crabs produced by "江蘇太湖水產有限公司" this year was sold to those traders concerned.

13. Only aquaculture farms pre-approved and registered for supply to Hong Kong could have their hairy crabs exported to Hong Kong. This arrangement has been in place and implemented for years. Registration is subject to quality checks by the Mainland inspection and quarantine authorities. The relevant Mainland authorities would only allow aquaculture farms which are registered with the General Administration of Quality Supervision, Inspection and Quarantine of the Mainland (AQSIQ) to export hairy crabs to The integrity of our food safety control regime would be Hong Kong. undermined if the allegations put forward by these traders are accepted. Upon clarification by the AQSIQ, all hairy crabs exported to Hong Kong had been sourced from aquaculture farms registered for supply to Hong Kong, i.e. "江蘇太湖水產有限公司" in this particular case the samples of which were found to contain an excessive level of dioxin and dioxin-like PCBs. We shall nevertheless continue to keep up our liaison with the Mainland authorities to ensure that the regulatory arrangements remain rigorous and updated.

Conclusion

14. Members are invited to note the progress of the follow up to the hairy crab incident.

Food and Health Bureau Food and Environmental Hygiene Department Centre for Food Safety November 2016