

**For Discussion  
On 17 May 2011**

**LegCo Panel on Food Safety and Environmental Hygiene**

**Update on monitoring of radiation contamination  
of food products imported from Japan and the Mainland**

**Purpose**

This paper briefs Members on the food safety measures in response to the Japan Fukushima nuclear incident, including food surveillance work carried out by the Centre for Food Safety (CFS) and the issuance of an order under section 78B of the Public Health and Municipal Services Ordinance (Cap. 132) to prohibit the import and supply of certain food products from five prefectures in Japan. The paper also briefs Members on the monitoring of radiation contamination of vegetables imported from the Mainland.

**Background**

2. The earthquake and the subsequent tsunami in Japan on 11 March 2011 have damaged the nuclear power plant in Fukushima prefecture, leading to release of radioactive substances in the environment. It was reported by the Japan authorities that the release of these radioactive substances had contaminated certain foods in a number of prefectures at levels hazardous to human health.

**Food Surveillance**

3. Fresh produce e.g. milk, vegetables, fruits, etc. are more prone to radiation contamination immediately after nuclear incident. Therefore CFS has, since 12 March 2011, stepped up surveillance and has tested the radiation level of all fresh food imported from Japan, including vegetables, fruits and milk. Other foodstuffs such as meat, aquatic products and milk powder are also monitored. CFS currently adopts the standards laid down by the Codex Alimentarius Commission (Codex) in the Guideline Levels

for Radionuclides in Foods Contaminated following a Nuclear or Radiological Emergency (Guideline Levels) in testing the radiation levels of food. Relevant radionuclides include iodine-131 (level: 100 Bq/kg), caesium-134 and caesium-137 (level: 1 000 Bq/kg), which are most closely associated with health risks.

4. Currently, for every food consignment from Japan, be it coming by air or by sea, screening is conducted by hand-held survey meter for surface contamination and samples will be taken from every consignment for examination by the Contamination Monitoring System (CMS). Food consignment that fails hand-held survey meter or CMS screening will be held and sample will be sent to Government Laboratory for further quantitative analysis. The Chairman and three members of this Panel visited the Airport Food Inspection Office of CFS on 8 April 2011 and were briefed on the inspection procedure.

5. As at noon of 9 May 2011, a total of 6 620 samples have been tested. All results are satisfactory except the three samples mentioned in paragraph 6 below.

### **Order Made under section 78B of Cap. 132**

6. On 23 March 2011, three samples of vegetables imported from Chiba prefecture were detected to contain iodine-131 with a level exceeding the standards laid down in the Guideline Levels, including a white radish sample at 260 Bq/kg, a turnip sample at 800 Bq/kg and a spinach sample at 1 000 Bq/kg. Although consumption of the food would not pose immediate health risks, the Director of Food and Environmental Hygiene (DFEH) decided to make an order under section 78B of Cap.132 (the Order) to safeguard food safety and public health. A copy of the LegCo Brief which provided the background and the details of the Order is at **Annex**.

7. The Order prohibits the import and supply of the following food products which are/were harvested, manufactured, processed or packed on or after 11 March 2011 from the five affected prefectures in Japan, namely Fukushima, Ibaraki, Tochigi, Chiba and Gunma –

All fruits and vegetables;

All milk, milk beverages, dried milk; and

All chilled or frozen game, meat and poultry, all poultry eggs and all live, chilled or frozen aquatic products, unless accompanied by a certificate issued by the competent authority of Japan certifying that the radiation levels do not exceed the standards laid down by the Guideline Levels.

8. The Order is directed to all persons and has taken effect at 12:00 noon on 24 March 2011. Any person who contravenes a term of the Order commits an offence and is liable on conviction to a fine at level 6 (\$100,000) and to imprisonment for 12 months.

9. As for other processed food imported from Japan, for example, biscuits, candies, cakes, and frozen confections, the CFS will continue surveillance at the import level by conducting tests for radiation level.

10. As part of CFS' food surveillance programme, samples of food from all sources are also taken at wholesale and retail levels for radiation testing. In response to the public concern over radiation contamination, CFS has also increased the proportion of samples on Japanese food. The results so far are all satisfactory.

11. CFS will keep in view the testing results of the samples of food imported from Japan. In the event that any samples were detected to contain radiation levels exceeding the Codex Guideline Levels, we are prepared to expand the scope of the Order, including the food types and prefectures from which the food is exported.

### **Radiological Testing of Fishery Products**

12. The Agriculture, Fisheries and Conservation Department has also stepped up surveillance on locally cultured and captured fish and started to collect samples from local fish culture zones and wholesale markets under the Fish Marketing Organization for radiological testing according to Codex Guideline Levels on a daily basis. As at noon of 9 May 2011, 528 samples of fishery products were tested, all with satisfactory results.

### **Consultation with the Expert Committee on Food Safety**

13. CFS briefed the Expert Committee on Food Safety (Expert

Committee) at the meeting on 6 April 2011. The Expert Committee, which comprised overseas food experts from Singapore, Australia and Mainland as well as local experts, considered that Hong Kong had taken appropriate food safety measures in response to the incident. The Expert Committee considered that the current coverage of the food surveillance was appropriate and that CFS should continue to monitor the three radionuclides – iodine 131, caesium-134 and caesium-137 – which are the main radionuclides representing health concern and most relevant in the acute phase of nuclear emergencies. The Expert Committee advised the CFS to keep in view the discussion and recommendation of the International Atomic Energy Agency and World Health Organization in formulating the medium and long term monitoring programme.

### **Liaison with the Japanese Government and Stakeholders**

14. CFS has been monitoring the situation in Japan closely and developments in the relevant areas through close liaison with the Consulate-General of Japan. CFS met with the importers and distributors supplying Japanese food on 14 March 2011 and briefed the trade again on the section 78B order issued by DFEH on 23 March 2011. Since 25 March 2011, CFS has been issuing a letter to the relevant importer stating that the radiation testing results were satisfactory for the concerned food consignments which have passed CFS' testing with satisfactory results.

15. CFS will continue to closely monitor the situation and make reference to the recommendations of international authorities including the World Health Organization, and the International Atomic Energy Agency.

### **Vegetables imported from the Mainland**

16. According to Mainland authorities, vegetables in 12 provinces, autonomous regions or municipalities were found to contain traces of radiation as at 14 April 2011. Although the levels found were much lower than the Guideline Levels, the Food and Health Bureau has discussed the matter with the General Administration of Quality Supervision, Inspection and Quarantine (AQSIQ). AQSIQ indicated its support of safeguarding the food safety of vegetables supplied to Hong Kong. CFS has included vegetables from the Mainland for surveillance

of radiation level. In April 2011, 20 vegetable samples from the Mainland were examined for radiation contamination and all results were satisfactory. CFS will closely monitor the situation, and continue to sample food imported into Hong Kong using a risk based approach.

### **Advice sought**

17. Members are invited to note and comment on the food safety measures taken by the CFS in response to the Japan Fukushima nuclear incident.

**Food and Health Bureau  
Food and Environmental Hygiene Department  
Centre for Food Safety  
May 2011**

File Ref: FHB/F/5/1/37

## LEGISLATIVE COUNCIL BRIEF

### **Issuance of an order under section 78B of the Public Health and Municipal Services Ordinance (Cap. 132) to prohibit the import and supply of certain food products from five prefectures in Japan**

#### ISSUE

The Director of Food and Environmental Hygiene (DFEH) made an order (at Annex) under section 78B of the Public Health and Municipal Services Ordinance (Cap. 132) (the Order) on 23 March 2011 to prohibit the import of specified food products set out in paragraph 7 below which are/were harvested, manufactured, processed or packed on or after 11 March 2011 from five prefectures of Japan i.e. Fukushima, Ibaraki, Tochigi, Gunma and Chiba with effect from 12:00 noon on 24 March 2011. The Order will also prohibit the supply, within Hong Kong, of the specified food imported into the territory after noon on 24 March 2011. The Order was published in the gazette on 24 March 2011.

#### JUSTIFICATIONS

2. Owing to the massive earthquake and the subsequent tsunami which happened in Japan on 11 March 2011, the Daiichi nuclear power plant in Fukushima prefecture was damaged, leading to release of radioactive substances in the environment. Tests by the Japan authorities have demonstrated that the release of radioactive substances has contaminated certain foods in the prefectures in the vicinity of the nuclear power plant, including Fukushima, Ibaraki, Tochigi and Gunma. Radiation levels hazardous to human health were found in foods including various vegetables and milk.

3. The Centre for Food Safety (CFS) of Hong Kong has, since 12 March, stepped up surveillance and has tested the radiation level of fresh food imported from Japan, including vegetables, fruits, and milk. CFS

currently adopts the standards laid down by the Codex Alimentarius Commission (Codex) in the Guideline Levels for Radionuclides in Foods Contaminated following a Nuclear or Radiological Emergency (Guideline Levels) in testing the radiation levels of food. Relevant radionuclides include iodine-131 (level: 100 bq/kg), caesium-134 and caesium-137 (level: 1,000 bq/kg), etc, which are most closely associated with health risks.

4. As at 23 March 2011, CFS has examined a total of 288 consignments of Japanese food. Three samples of vegetables imported on 23 March 2011 from Chiba prefecture were detected to contain iodine-131 with a level exceeding the standards laid down in the Guideline Levels, including a white radish sample at 260 bq/kg, a turnip sample at 800 bq/kg and a spinach sample at 1 000 bq/kg. Although consumption of the food will not pose immediate health risks, DFEH decided to make the Order to safeguard food safety and public health.

#### **ORDER MADE UNDER SECTION 78B OF CAP. 132**

5. Section 78B(1) of Cap. 132 provides that the Authority (i.e. DFEH) may make an order to, among others, prohibit the import and the supply of any food for the period specified in the order. Section 78B(2) stipulates that the Authority may only make a section 78B order if the Authority has reasonable grounds at the time of making the order to believe that the making of the order is necessary to prevent or reduce a possibility of danger to public health or to mitigate any adverse consequence of a danger to public health.

6. Consumption of food contaminated with radioactive substances will increase the amount of radioactivity a person is exposed to and could increase the health risks, including cancers, associated with the exposure. DFEH has therefore decided it was necessary to make a section 78B order to prevent or reduce a possibility of danger to public health brought about by the import of the radiation-contaminated food.

7. A copy of the Order is at [Annex](#). The Order prohibits the import and supply of the following food products which are/were harvested, manufactured, processed or packed on or after 11 March 2011 from the five affected prefectures in Japan, namely Fukushima, Ibaraki, Tochigi, Chiba and Gunma –



- All fruits and vegetables;
- All milk, milk beverages, dried milk; and
- All chilled or frozen game, meat and poultry, all poultry eggs and all live, chilled or frozen aquatic products unless accompanied by a certificate issued by the competent authority of Japan certifying that the radiation levels do not exceed the standards laid down by the Guideline Levels.

8. The Order is directed to all persons and has taken effect at 12:00 noon on 24 March 2011. Any person who contravenes a term of the Order commits an offence and is liable on conviction to a fine at level 6 and to imprisonment for 12 months.

9. As for other processed food imported from Japan, for example, biscuits, candies, cakes, and frozen confections, the CFS will continue surveillance at the import level by conducting tests for radiation level.

#### **PUBLICITY**

10. A press release was issued on 23 March 2011 and a briefing for traders was arranged on the same day. A spokesman is available to answer press enquiries.

#### **ENQUIRIES**

11. Any enquiries on this brief may be addressed to Mr Kevin Yeung Principal Assistant Secretary (Food) at 2973 8297.

**Food and Health Bureau**

**24 March 2011**



**PUBLIC HEALTH AND MUNICIPAL SERVICES ORDINANCE**  
**(Chapter 132)**  
**(Section 78B)**  
**Section 78B Order**

Order No. : CFS/1/2011  
FEHD Ref. : FEHD/CFS/78B

TO : All persons

This Order takes effect at 12:00 noon on 24 March 2011.

I now have reasonable grounds to believe that the making of this order in relation to the food specified in Annex A is necessary to prevent or reduce a possibility of danger to public health, or to mitigate any adverse consequence of a danger to public health, the details of which are specified in Annex B. I DO, in exercise of my powers under section 78B(1) of the Public Health and Municipal Services Ordinance (Chapter 132), order that :

- a. you be prohibited from importing into Hong Kong the food specified in Annex A, that is intended for human consumption, for the period from 12:00 noon on 24 March 2011 until further notice.
- b. you be prohibited from supplying<sup>1</sup> within Hong Kong the food specified in Annex A, that is imported into Hong Kong after 12:00 noon on 24 March 2011, and is intended for human consumption, for the period from 12:00 noon on 24 March 2011 until further notice.


If you feel that you are aggrieved by this order, you may, within 28 days from becoming bound by it (that is the date and time specified in paragraph 1), appeal to the Municipal Services Appeals Board.

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<sup>1</sup> "Supplying" means (a) selling the food; (b) offering, keeping or exhibiting the food for sale; (c) exchanging or disposing of the food for consideration; (d) transmitting, conveying or delivering the food in pursuance of (i) a sale; or (ii) an exchange or disposal for consideration; or (e) for commercial purposes, giving the food as a prize or making a gift of the food.

Note : A person bound by this order who contravenes a term of the order commits an offence and is liable on conviction to a fine at level 6 and to imprisonment for 12 months. It is not a defence for a person to show that the food concerned is the subject of a licence, permit or any other form of authorization issued or granted under this or any other Ordinance.

Dated this 23<sup>rd</sup> March 2011



(LEUNG CHEUK MAN)

Director of Food and Environmental Hygiene

**FOOD SPECIFIED IN THE ORDER**

Brand Name & Food Name/ Designation	Manufacturer's/ Packer's Name & Address	Country of Origin/Place of Origin/ Distributor's Address	Count/ Weight/ Volume	Best Before/ Use By Date	Other Relevant Information/ Description
Food name: <ul style="list-style-type: none"> <li>• All fruits and vegetables</li> <li>• All milk, milk beverages and dried milk</li> <li>• All chilled or frozen game, meat and poultry, all poultry eggs, and all live, chilled or frozen aquatic products, unless accompanied by a certificate issued by the competent authority of Japan certifying that the radiation levels do not exceed the standards laid down by the Codex Alimentarius Commission in the Guideline Levels for Radionuclides in Foods Contaminated following a Nuclear or Radiological Emergency</li> </ul>	Not applicable	Originated from the following prefectures of Japan: <ul style="list-style-type: none"> <li>• Fukushima</li> <li>• Ibaraki</li> <li>• Tochigi</li> <li>• Gunma</li> <li>• Chiba</li> </ul>	Not applicable	Not applicable	Relevant food harvested, manufactured, processed or packed on or after 11 March 2011

**REASON FOR MAKING THE ORDER AND  
PRINCIPAL FACTORS THAT LED TO MAKING OF THE ORDER**

Summary of incident:

Owing to the massive earthquake and the subsequent tsunami happened in Japan on 11 March 2011, the Daiichi nuclear power plant in Fukushima prefecture was damaged, leading to release of radioactive substances into the environment.

Tests by the Japan authorities have demonstrated that the release of radioactive substances has contaminated certain foods in prefectures in the vicinity of the nuclear power plant, including Fukushima, Ibaraki, Tochigi and Gunma. Radiation levels hazardous to human health were found in foods including various vegetables and milk.

Besides, tests of 3 samples (1 spinach, 1 turnip and 1 white radish) imported from Chiba prefecture of Japan by the Hong Kong Centre for Food Safety on 23 March 2011 indicated that they have been contaminated with radioactive substances (Iodine I-131) by such a level hazardous to human health.

Source of information:

- Japanese Government
- World Health Organization
- Local testing results

Health effects:

Food contaminated with radioactive substances will not appear spoiled, but consuming such food will increase the amount of radioactivity a person is exposed to and could increase the health risks, including cancers, associated with the exposure. The exact effects on human body and the specific organs affected will depend on the radionuclide ingested and the amount being ingested.