

Refined Regulatory Framework for Pesticide Residues in Food in Hong Kong Consultation Highlights

Technical Meeting
6 September 2011

Public Consultation

- ✿ 13 July 2011 – 19 September 2011
- ✿ Three public forums
 - ✿ 28 July 2011
 - ✿ 20 August 2011
 - ✿ 30 August 2011
- ✿ Trade consultation forums
 - ✿ 13 July 2011
 - ✿ 9 September 2011
- ✿ Other meetings and consultation sessions

Highlights

Highlights (1)

- ✿ Related to food and the scope of regulation :
 - ✿ Scope of the proposed Regulation – what is food?
 - ✿ How to reduce dietary intake of pesticide residues?

Highlight (2)

- ✿ Related to compliance and enforcement:
 - ✦ How to deal with pesticide-food pair without specified MRL?
 - ✦ How to deal with the residue limits for pesticide residues in processed food?
 - ✦ Does a trader need to test all the 300+ pesticides in the list in order to comply with the proposed Regulation?
 - ✦ Any recommended test methods for the 300+ pesticides?
 - ✦ How would CFS collect food samples for testing in order to monitor pesticide residues in food?
 - ✦ Penalty – too lenient or too stringent?

Highlights (3)

✿ Others

- ✿ Required documentation for the application for adding/revising a MRL and adding an exempted substance
- ✿ Comments on MRLs for specific pesticide-food pairs

Related to food and the scope of regulation (1)

✿ Scope of the proposed Regulation – what is food?

“Food” (食物) includes—

- (a) drink;
- (b) ice;
- (c) chewing gum and other products of a similar nature and use;
- (d) smokeless tobacco products; and
- (e) articles and substances used as ingredients in the preparation of food,

but does not include—

- (f) live animals or live birds, other than live aquatic products;
- (g) fodder or feeding stuffs for animals, birds or aquatic products; or
- (h) medicine as defined by section 2(1) of the Pharmacy and Poisons Ordinance (Cap. 138) or Chinese herbal medicine or proprietary Chinese medicine as defined by section 2(1) of the Chinese Medicine Ordinance (Cap. 549)

~ Public Health and Municipal Services Ordinance (Cap. 132)

Related to food and the scope of regulation (2)

✿ How to reduce dietary intake of pesticide residues?

- ✿ Take a balanced diet and eat a variety of fruits and vegetables so as to avoid excessive exposure to pesticide residues from a small range of food items.
- ✿ Wash vegetables in running water for several times, then soak in water for one hour.
- ✿ Blanch vegetables in boiling water for one minute and discard the water used for blanching.
 - If washing and blanching vegetables were combined, the pesticide residues could be reduced further.
- ✿ May further reduce the intake of pesticide residues by removing the outer leaves and peel the vegetables.

Related to compliance and enforcement (1)

- ✿ How to deal with pesticide-food pair without specified MRL?
 - ✿ Except for exempted substances, import and sale of the concerned food will be prohibited unless the Director of Food and Environmental Hygiene (DFEH) is satisfied that the detected level of pesticide residue is not dangerous or prejudicial to health.
 - Conduct risk assessment, taking into account a host of factors including safety reference values (i.e. acceptable daily intake and acute reference dose) and local situation
 - ✿ Traders, if needed, may apply to DFEH for addition or revision of MRL, EMRL and exempted substance

Related to compliance and enforcement (2)

- ✿ How to deal with the residue limits for pesticide residues in processed food?
 - ✦ Food in dried, dehydrated, or concentrated form
 - the MRLs/EMRLs shall apply to any food in a dried, dehydrated or concentrated form with adjustment determined with respect to the weight of the food after dilution or reconstitution, where appropriate
 - ✦ Processed food other than dried, dehydrated or concentrated form
 - apart from food in a dried, dehydrated or concentrated form, the MRLs/EMRLs shall apply equally to primary food commodities and processed food
 - ✦ Compounded food
 - compounded food may contain amount of pesticide residue which does not exceed, in relation to the quantity of the relevant food ingredient used, the level permitted by the MRLs/EMRLs

Food in dried, dehydrated or concentrated form

✿ Dehydrated carrot

- ✦ Water content of carrot: 89%
- ✦ Water content of dehydrated carrot: 10%
- ✦ Pesticide MRL in carrot = 1 mg/kg
- ✦ Pesticide MRL in dehydrated carrot

$$= \text{Pesticide MRL in carrot} \times \frac{100\% - \text{“Water content in dehydrated carrot”} (\%)}{100\% - \text{“Water content in carrot”} (\%)}$$

$$= 1 \times ((100 - 10) / (100 - 89)) = 1 \times 8.2$$

$$= 8.2 \text{ mg/kg}$$

✿ Concentrated orange juice (10x)

- ✦ Pesticide MRL in fresh orange juice: 0.5 mg/kg
- ✦ Pesticide MRL in concentrated orange juice: 5 mg/kg

Processed food other than dried, dehydrated or concentrated form

- ✿ Pesticide MRL in rice, grain: 2 mg/kg
 - ✿ Pesticide MRL in polished rice: 2 mg/kg
 - ✿ Pesticide MRL in rice flour: 2 mg/kg
 - ✿ Pesticide MRL in rice noodle: 2 mg/kg

Compounded food

- ✿ Mixed salad (100g):

- ✦ Tomato (30 g by weight, i.e. 30%)
- ✦ Lettuce (50g by weight, i.e. 50%)
- ✦ Corn (20g by weight, i.e. 20%)

- ✿ MRLs for pesticide A –

- ✦ Tomato: 2 mg/kg
- ✦ Lettuce: 1 mg/kg
- ✦ Corn: 0.5 mg/kg

- ✿ Maximum permitted level for pesticide A in mixed salad

$$= (2 \times 0.3 + 1 \times 0.5 + 0.5 \times 0.2)$$

$$= 1.2 \text{ mg/kg}$$

Related to compliance and enforcement (3)

- ✿ Does a trader need to test all the 300+ pesticides in the list in order to comply with the proposed Regulation?
- ✿ Any recommended test methods for the 300+ pesticides?

Related to compliance and enforcement (3)

- ✿ There are around 300 pesticides included in the list, the number of residue limits applicable to individual food would be much smaller
 - ✿ Normally only a few pesticides would be applied to individual food crops
- ✿ Food manufacturers and importers/wholesalers are advised to deal with reputable food suppliers who can provide documentary proof on compliance with the proposed Regulation
 - ✿ keep the transaction documents for record.

Related to compliance and enforcement (3)

- ❁ Laboratories may use the relevant technical criteria protocols or reference methods formulated by international / national organisations, or adopt appropriate test methods and fulfill the quality requirements being specified according to their needs, actual conditions, facilities and resources.
- ❁ Two workshops on pesticide residues testing have already been conducted in May and June 2011 respectively to discuss reference methods formulated by national institutions and international organisations related to the proposed regulatory framework, other reference methods or technical criteria protocols, relevant equipment and standard reference materials.
- ❁ When necessary, the Government Laboratory will further provide relevant information and conduct focused discussions related to testing.

Related to compliance and enforcement (4)

- ✿ How would CFS collect food samples for testing in order to monitor pesticide residues in food?
 - ✦ CFS operates a Food Surveillance Programme and regularly takes food samples at import, wholesale and retail levels for testing of pesticide residues.

Related to compliance and enforcement (5)

✿ Penalty – too lenient or too stringent?

- ✦ The maximum penalty for contravention will be a fine at level 5 (\$50,000) and imprisonment for six months
 - in line with the penalty for selling food which is unfit for human consumption under section 54 of Cap.132.

Related to compliance and enforcement (5)

✿ Statutory defence

- ✿ Section 71 of Cap. 132 stipulates 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.
- ✿ Section 70 of Cap.132 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 used all due diligence to secure that the provisions in question were complied with, he may plead this as a defence.

Others (1)

- ✿ Required documentation for the application for adding/revising a MRL/EMRL and adding an exempted substance
 - ✦ current or anticipated availability of the concerned food product in Hong Kong;
 - ✦ relevant toxicological data and safety reference values of the concerned pesticide;
 - ✦ relevant pesticide residue(s) analytical method(s);
 - ✦ (for applications related to MRLs/EMRLs) whether the relevant MRLs or EMRLs of the concerned pesticide have been established by Codex or overseas jurisdictions;
 - ✦ (for applications related to exempted substances) whether the relevant pesticide has been exempted from establishing MRLs in food by overseas jurisdictions;
 - ✦ any other documents or information reasonably required by the Director for the purpose of considering the application.

Others (2)

- ✿ Comments on MRLs for specific pesticide-food pairs

End