

(Translation)

9 March 2018

Clerk to Panel on Food Safety and Environmental Hygiene
Legislative Council Secretariat
Legislative Council Complex
1 Legislative Council Road
Central, Hong Kong
(Attn.: Miss Josephine SO)
(Fax: 2509 9055)

Dear Miss SO,

**LegCo Panel on Food Safety and Environmental Hygiene
Standard for Inorganic Arsenic in Rice**

Thank you for your letter of 2 March 2018, making reference to a letter of 28 February 2018 from Dr Hon CHIANG Lai-wan to the Chairman of the Legislative Council Panel on Food Safety and Environmental Hygiene (the Panel). Regarding Dr Hon CHIANG's concern over the standard for inorganic arsenic in rice, our reply is set out below.

Metals are naturally present and ubiquitous in the environment. Metallic contaminants may enter the food supply chain through environmental contamination or during food production process. They may therefore be present in food in trace amount.

Global-wise, a multi-pronged approach is adopted to prevent excessive intake of metallic contaminants from food, which include keeping the metallic contaminant in food at a as low as reasonably achievable (ALARA) level through best practices such as Good Agricultural Practice and Good Manufacturing Practice; regulating the types and levels of metallic contamination in food through legislation; and providing dietary advice to the general public, particularly to the susceptible groups.

The current standards for arsenic in polished rice adopted by the Codex Alimentarius Commission (Codex) and other economies are as follows:

Maximum levels (MLs) for arsenic in polished rice (mg/kg)	International organisation / country / economy
0.2 (expressed as inorganic arsenic)	Codex, European Union (EU), the Mainland, Korea and Singapore
1 (expressed as total arsenic)	Australia, New Zealand
2 (expressed as total arsenic)	Thailand
No relevant standard	United States of America (USA), Canada, Japan, Taiwan

Under the existing Food Adulteration (Metallic Contamination) Regulations (Cap. 132V) (the Regulations), the maximum permitted concentration (MPC) for polished rice is 1.4 ppm (expressed as As_2O_3). We have completed the public consultation exercise on the proposed amendments to the Regulations in September 2017 and plan to put forward the Amendment Regulations to the Legislative Council in 2018. The proposed amendments include tightening the ML for arsenic in polished rice to 0.2 mg/kg (expressed as inorganic arsenic), which is in line with the Codex ML and comparable to relevant MLs adopted by economies with rice as the staple food (see the table above). Keeping the Regulations on par with the Codex standards will safeguard food safety, bring our regulatory practices in alignment with international standards, and prevent possible trade barriers and disputes.

Codex has not established any ML for arsenic in rice destined for the production of foods for infants and young children nor cereal products for infants and young children. We understand that the U.S. Food and Drug Administration has proposed an action level of 0.1 mg/kg for arsenic for infant rice cereals. That action level is for consultation only and has not yet been adopted. A ML of 0.1 mg/kg for inorganic arsenic in rice destined for the production of foods for infants and young children has been established in EU. Nevertheless, there is no international consensus on the ML for arsenic in products specifically for infants and young children, particularly among the economies with rice as the staple food. The Centre for Food Safety (CFS) will closely keep in view international development of such standards. For food / food groups without specific MLs under the Regulations, CFS will continue to conduct risk assessment to assess whether the food concerned will be dangerous or prejudicial to health by virtue of the Public Health and Municipal Services Ordinance (Cap. 132). CFS will continue to provide dietary advice to the general public (particularly to the susceptible groups) as appropriate.

CFS collected a total of 450 rice samples (including polished rice and

husked rice) for the testing of arsenic over the past 5 years. The arsenic levels of about 30% of the samples were below the reporting limit. For samples detected with arsenic, the arsenic levels ranged from 0.09 to 0.613 mg/kg (expressed as As₂O₃) which meant that all of them complied with the existing MPC of 1.4 mg/kg (expressed as As₂O₃). Also, we conducted additional baseline studies with respect to the Codex ML of 0.2 mg/kg (expressed as inorganic arsenic) for polished rice and found that all the samples complied with the aforementioned Codex standard.

According to the “Study of Heavy Metals in Rice” recently published by the Hong Kong Organic Resource Centre, all the rice samples collected under the study were rice for general consumption, not rice destined for the production of foods for infants and young children. The reported levels of inorganic arsenic in all of the rice samples were below the ML for polished rice of 0.2 mg/kg set by Codex.

Yours sincerely,

(Miss Cherry WONG)
for Secretary for Food and Health

cc.:

Controller, Centre for Food Safety, Food and Environmental Hygiene Department
(Attn.: Dr Samuel YEUNG)
(Fax: 2526 8279)