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Meeting of Panel on Food Safety and Environmental Hygiene on 13 December 2005

Background Brief prepared by Legislative Council Secretariat

Quality of seawater for keeping seafood

Purpose

This paper summarises the discussions by the Panel on Food Safety and Environment Hygiene on issues relating to the quality of seawater for keeping seafood.

Background

2. In 1998, following a cluster of cholera cases associated with consumption of seafood, an inter-departmental working group, which comprised representatives of the then Agriculture and Fisheries Department, the former Urban Services Department and Regional Services Department, Department of Health, Environmental Protection Department and Water Supplies Department, was formed to examine ways to improve control over the hygiene quality of seawater in fish tanks used for keeping live seafood. A surveillance and sampling system was subsequently developed and used by the Food and Environmental Hygiene Department (FEHD).

3. Section 10A of the Food Business Regulations (Cap 132 sub leg X) provides that no person shall in the course of any food business keep any live fish or shell fish intended for human consumption in water of a quality below the standard specified by the Director of Food and Environmental Hygiene by notice published in the Gazette. The specified standard is "E Coli less than 610 per 100ml and absence of pathogenic organisms". To enforce the provision, FEHD takes samples of fish tank water, once every eight weeks, from each stall/premises (including supermarkets) selling live marine seafood for E Coli testing. When samples are found to exceed the prescribed standard, FEHD will conduct investigations to find out the source of

contamination and collect follow-up samples for further testing. Breaches of the standards can lead to a fine up to \$10,000 and imprisonment for three months upon conviction.

4. Given the public health risk associated with the presence of Vibrio Cholerae in fish tank water, FEHD also takes samples for Vibrio Cholerae analysis during the high-risk season from May to September. The sampling frequency can be adjusted as circumstances require. Once the presence of highly infectious cholera bacteria is detected, the premises concerned may be closed by FEHD on public health grounds, under the authority conferred by section 128C of the Public Health and Municipal Services Ordinance (Cap. 132).

5. Despite the surveillance and sampling measures adopted by FEHD, Vibrio Cholerae was discovered from time to time in fish tank water used for keeping live seafood. These incidents had aroused much public concern about the adequacy and effectiveness of the existing control over the quality and hygiene standard of fish tank water. The Panel on Food Safety and Environmental Hygiene had discussed measures to control and promote fish tank water quality and seafood safety at seven meetings on 5 September 2001, 18 March 2002, 16 September 2003, 12 November 2003, 27 April 2004, 9 November 2004 and 15 April 2005.

Discussions by the Panel on Food Safety and Environmental Hygiene

Filtration and disinfection systems

6. At the special meeting of the Panel on 5 September 2001, the Administration advised that a properly installed and well-maintained disinfection and filtration system for fish tanks was scientifically proven to be effective in the control of the level of bacteria in the seawater. It was also a requirement in the licensing/tenancy conditions that seafood vendors and seafood market stall operators must use an effective disinfection and filtration equipment.

7. Members expressed concern that, although such requirements had been put in place for over two years, there were no objective and specific guidelines to the trade on how the disinfection and filtration systems should be maintained. The Administration undertook to review the effectiveness of the filtration and disinfection systems used by the trade, with a view to recommending improvements and drawing up compliance standards for the trade.

8. The Administration informed the Panel of the review findings at the meeting on 18 March 2002. Most seafood retail outlets were found to have varied practices in the management and cleansing of their filtration and disinfection systems. FEHD therefore issued a set of revised guidelines to give clearer specifications of the standards and practices. The Panel generally agreed that the revised guidelines were more detailed and specific. Hon Tommy CHEUNG opined that full compliance with the revised guidelines would not provide 100% guarantee to the quality of the fish tank waters, as live seafood itself could also be a vehicle for cholera transmission.

Regulation of seawater at source

9. At the Panel meetings in 2001 and 2002, members urged the Administration to consider measures to regulate the quality of seawater at source and throughout the delivery process. These suggestions included –

- (a) centralising seawater supply;
- (b) prohibiting abstraction of seawater from the coastline and typhoon shelters;
- (c) designating seawater abstraction spots for seawater suppliers;
- (d) regulating/licensing seawater suppliers and trucks used for delivery of seawater; and
- (e) promoting the use of synthetic seawater.

10. At the Panel meeting on 18 March 2002, the Administration advised that establishing a new plant to provide centralised seawater supply was not financially viable. As there would be cost implications for trade operators, they might not choose to use the centralised seawater supply. As an alternative, the Administration would continue to promote the use of synthetic seawater which was more hygienic.

11. As regards the proposed licensing system for seawater suppliers, the Administration advised in 2002 that there would be resource implications and enforcement difficulties. As contamination of the seawater could still occur after delivery to retail outlets, it would be difficult to pinpoint responsibility if the fish tank water was subsequently found to have problems. The Administration considered that it was more cost-effective to implement enhanced measures to improve control of the quality of fish tank water at the retail level. Members remained of the view that seawater suppliers and the trucks used for delivery of seawater should be regulated to provide assurance in the quality of seawater supplied to fish stalls.

12. On the suggestion of designating specific locations for abstraction of seawater, the Administration was of the view that that given the long shoreline of Hong Kong, it would be very difficult to enforce a control system whereby workers in the seafood

trade were only allowed to draw seawater at designated locations. Hon Fred LI suggested the Administration to explore the possibility of introducing legislation to prohibit people from abstracting seawater from contaminated areas. The proposal was further discussed at the Panel meetings on 12 November 2003 and 27 April 2004. At the latter meeting, the Administration informed the Panel that it would consider amending section 10A of the Food Business Regulation to prohibit abstraction of seawater from areas adjacent to the coast as specified in a Schedule. Such locations would include typhoon shelters. Panel members generally supported the proposal and sought clarification on the enforcement of the proposed legislation. Members suggested that the Administration should specify very clearly in the legislation those areas where abstraction of seawater would be prohibited.

13. At the meeting on 9 November 2004, the Administration informed the Panel that it intended to prohibit the abstraction of seawater from waters in the Victoria Harbour, typhoon shelters and the western side of the New Territories because of the high level of E Coli in waters in these areas. The Panel was briefed on the details on 15 April 2005.

14. While most members generally supported the proposal to prohibit abstraction of seawater at areas where the water quality was not acceptable, they expressed concern about the enforceability of the proposal in view of the extensive areas to be Some members also expressed reservations about the proposal of covered. prohibiting seawater abstraction from the entire Victoria Harbour, as this would have adverse impact on seafood wholesalers, restaurants and retailers. A member suggested that the Administration should consider designating only the western side of Hong Kong Island and the New Territories as prohibited areas for abstraction of seawater, as the quality of seawater there was unacceptable. Some members considered that to facilitate compliance and enforcement, seawater suppliers should instead be allowed to abstract seawater from the eastern side of the New Territories only.

15. Hon Tommy CHEUNG was of the view that the legislative proposal could not ensure the quality of seawater for keeping seafood, if the regulatory framework did not include transporters of seawater. He considered that the Administration should monitor the whole supply chain of seawater. The Administration advised that with the implementation of accreditation scheme (paragraph 16 below) and the legislative proposal, the whole supply chain of seawater would be put under monitoring.

Proposed accreditation scheme for seawater

16. The Administration briefed the Panel at the meetings on 9 November 2004 and 15 April 2005 on the proposal to establish a voluntary accreditation scheme for seawater suppliers to promote self-regulation by the trade. Under the scheme, seawater suppliers (including seafood wholesalers and traders) who complied with specified criteria would be given an accreditation status. The accredited suppliers

would be subject to FEHD inspections. A de-merit point system would also be devised and any irregularities would be recorded. Accredited suppliers would lose the status of accreditation when they had accumulated a specified number of de-merit points. Seafood restaurants/retail shops would be encouraged to source seawater from accredited suppliers, and be allowed to post the certificate of the accredited supplier or a logo on their business premises.

17. While some Panel members expressed support for the scheme, they raised concern about the effectiveness of the scheme if participation was purely voluntary. The Administration advised that if the response from the trade in participating the scheme was poor and the fish tank water quality showed no improvement, the Administration would consider making the accreditation scheme mandatory. Hon Tommy CHEUNG stated that he was not in favour of introducing legislation to regulate commercial activities. He considered that the proposed scheme would be successful only if incentive was provided to encourage the trade to source seawater from accredited suppliers.

18. The Administration informed the Panel at the briefing on the Policy Address on 17 October 2005 that the Hong Kong Productivity Council had been appointed as the Accrediting Body to develop and implement a voluntary "Quality Seawater Assurance Scheme". The Administration was consulting the trade and relevant stakeholders on the accreditation criteria and would introduce the scheme in a few months' time.

Recent development

19. The Administration has proposed to brief the Panel on the launch of "Quality Seawater Assurance Scheme" on 13 December 2005.

Relevant papers

20. A list of relevant papers and documents is in the Appendix for members' easy reference. The papers and documents are available on the Council's website at http://www.legco.gov.hk/english/index.htm.

Council Business Division 2 Legislative Council Secretariat 7 December 2005

Appendix

Relevant Papers/Documents

Meeting	Meeting Date	Papers/Motion Passed/Council Question
Legislative Council	13 October 2004	Written question on "Quality of fresh water tanks at fish stalls" moved by Ir Dr Hon Raymond HO
Panel on Food Safety and Environmental Hygiene	5 September 2001	Administration's paper - Paper No. CB(2) 2248/00-01(01)
		Minutes of meeting LC Paper No. CB(2) 467/01-02
	18 March 2002	Administration's paper - Paper No. CB(2) 1326/01-02(03)
		Minutes of meeting LC Paper No. CB(2) 1614/01-02
	16 September 2003	Administration's papers - Paper No. CB(2) 3054/02-03(01) CB(2) 3054/02-03(02) (Chinese version only)
		Minutes of meeting LC Paper No. CB(2) 285/03-04
	12 November 2003	Administration's paper - Paper No. CB(2) 297/03-04(01)
		Minutes of meeting LC Paper No. CB(2) 705/03-04
	27 April 2004	Administration's paper - Paper No. CB(2) 2115/03-04(03)
		Minutes of meeting LC Paper No. CB(2) 2812/03-04

	Administration's paper – LC Paper No. LC Paper No. CB(2) 149/04-05(03) Background brief prepared by the Legislative Council Secretariat – LC Paper No. CB(2) 149/04-05(04) Minutes of meeting LC Paper No. CB(2) 361/04-05
15 April 2005	Administration's paper – LC Paper No. LC Paper No. CB(2) 1230/04-05(03) Minutes of meeting LC Paper No. CB(2) 1474/04-05