

**For discussion
on 6 October 2006**

**LegCo Panel on Food Safety and Environmental Hygiene
Monitoring the Quality of Seawater for Keeping Live Seafood**

PURPOSE

This paper briefs Members on the follow up actions taken in respect of recent complaints about the suspected use of flushing water for keeping live seafood by the operators of some fresh provision shops and the measures taken/to be taken for monitoring and improving the quality of fish tank water.

EXISTING CONTROL AND MONITORING SYSTEM

2. At present, the Food and Environmental Hygiene Department (FEHD) adopts a number of measures to control the quality of water used for keeping live fish and shell fish intended for sale for human consumption. These measures are set out in the following paragraphs.

Legislative Control

3. Under section 10A of the Food Business Regulation (Cap 132. sub. leg. X), 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 (DFEH) by notice published in the Gazette. The specified standard is “*E. coli* less than 610 per 100 ml and absence of pathogenic organisms”. Anyone in breach of the provision is liable to a maximum fine of \$10,000 and imprisonment of three months upon conviction.

Inspection Regime

4. In accordance with the licensing requirements/conditions for licensed food premises and tenancy conditions for public market stalls, licensees and market stall tenants are required to install proper filtration and disinfection facilities to filter and disinfect water used for keeping live seafood intended for human

consumption. They are also prohibited from using flushing water for keeping live seafood. The same requirements and conditions are applicable to live fish wholesalers operating under a permit system administered by FEHD.

5. FEHD staff inspect market fish stalls and wholesale premises once every eight weeks, and conduct regular inspections to supermarkets, fresh provision shops and restaurants in accordance with a risk-based inspection system to ensure that operators comply with the requirements and conditions. Repeated breaches of requirements and conditions may lead to cancellation of licence or permit or termination of market tenancy.

Water Sampling and Surveillance Programme

6. In addition to routine inspections, fish tank water samples are collected from all licensed food premises and market stalls, including premises holding a live fish permit, for *E. coli* testing once every eight weeks. To alert the premises with deteriorating quality of fish tank water or failing disinfection system at an early stage so that remedial measures could be carried out in a timely manner, the action level is set at 180 per 100 ml. Upon receipt of any report exceeding this action level, FEHD staff would inspect the premises concerned within three working days to give advice to the operators concerned to carry out proper maintenance work. Thereafter, follow-up samples would be taken within one week for both *E. coli* and *Vibrio cholerae* testing. If the test results of the follow-up samples remain unsatisfactory, FEHD staff would continue to conduct site inspections and take water samples until the irregularities are rectified.

7. In addition to the above, a separate and additional sample will be taken from each premise for *Vibrio cholerae* testing between May and September every year.

8. The sampling frequency is subject to regular review and can be flexibly adjusted as circumstances require. In 2005, over 10,000 samples were taken. Of these, 176 samples were found to contain *E. coli* above the action level of 180 per 100 ml, and 5 were found to have exceeded the legal limit of 610 per 100 ml. Prosecution actions were instituted against the operators concerned and follow up actions were taken until the premises concerned rectified the irregularities. In the first six months of 2006, over 5000 samples were collected. Of these, 23 exceeded the action level and two exceeded the legal limit. Prosecutions actions were taken against the two premises concerned and follow up actions were taken until the irregularities were rectified. In addition, one of the samples was found to

contain pathogenic *Vibrio cholerae* and the premises were closed on health hazard grounds under the authority conferred by section 128C of the Public Health and Municipal Services Ordinance (Cap.132).

Continuous Education

9. To remind operators on good practices, FEHD issues regular advisory letters to licensees/permittees and stall tenants selling live fish or shell fish for human consumption on how to ensure the quality of fish tank water. Detailed guidelines advising steps for cleaning water tanks and equipment used, and for the proper installation and maintenance of the filtration and disinfection facilities for fish tank water are also issued. The latest reminders were sent to operators in August 2006.

FOLLOW UP ACTIONS TAKEN IN RESPECT OF RECENT COMPLAINTS ON SUSPECTED USE OF FLUSHING WATER FOR KEEPING LIVE SEAFOOD IN SOME PREMISES

10. On 31 July 2006 and 1 August 2006, FEHD received a complaint respectively from a District Councillor and from the District Office (Yau Tsim Mong) (DO(YTM)), alleging that a number of seafood shops on Nelson Street had been drawing flushing water from their buildings illegally. Following the complaints, FEHD officers conducted two rounds of special inspections to the 14 premises selling live seafood on Nelson Street in the same month, but the use of flushing water for keeping live seafood on the premises was not detected.

11. Site visits were again made to the 14 premises in September by FEHD officers. Again, no irregularities were detected and FEHD officers took two rounds of 28 water samples from the premises concerned. One of the samples was later found to have exceeded the *E. coli* action level of 180 per 100 ml. In accordance with the procedure set out in paragraph 6 above, FEHD staff gave advice to the operator concerned on the proper maintenance of the water filtration and disinfection system, and will continue to conduct site inspections and take water samples from the premises concerned until the irregularities are rectified.

12. DO(YTM) had also referred the complaints in parallel to the Water Services Department (WSD) on 1 August 2006. As a result of its follow-up investigation, WSD issued in September three summonses under its legislation against three premises for taking water through an inside service for the purpose

other than that for which the water is supplied, namely flushing. All three premises were occupied by fish traders, two of them were selling chilled fish only, and the remaining one had live seafood on sale. We understand from WSD that they had not detected any use of flushing water for keeping live seafood for human consumption during its investigation.

13. WSD will be referring any such cases upon detection to FEHD as soon as possible for further investigation and follow up as appropriate. FEHD staff will in turn report to WSD any irregularities detected concerning the illegal use of flushing water during their site inspections. In the meantime, FEHD will continue to monitor the situation of the premises concerned along Nelson Street. In addition to routine inspections, blitz operations will be mounted as necessary to deter such malpractice.

LATEST DEVELOPMENTS OF OTHER MEASURES

Prohibition of Abstraction of Seawater from Areas Adjacent to the Coast

14. For more effective control of the quality of fish tank water, we submitted a proposal to this Panel on 15 April 2005 to amend the Food Business Regulation to prohibit abstraction of seawater from areas as specified in a schedule. According to the data collected by the Environmental Protection Department (EPD) on marine water quality in various locations and in the typhoon shelters in the past years, a consistently high level of *E.coli* was detected in waters in (a) the Victoria Harbour, (b) typhoon shelters, (c) areas surrounding Hong Kong Island, including Ap Lei Chau, and (d) the western side of the New Territories. In the light of EPD's findings, we propose to prohibit abstraction of seawater from the above areas for the purpose of keeping live seafood for human consumption.

15. In July and August 2006 we conducted several consultation sessions with the trade (including operators of fresh provision shops, restaurants and market stalls selling live seafood and seawater suppliers), and members of District Councils and Area Committees on the proposal. At these sessions, the intent of the proposed legislation was explained and the areas where abstraction of seawater would be banned by the proposed legislation were highlighted. The trade and the district representatives were generally supportive of the proposal. Our plan is to introduce the Amendment Regulation in 2007.

Quality Seawater Assurance Scheme

16. To encourage self-regulation of the trade, the Health, Welfare and Food Bureau has initiated a voluntary Quality Seawater Assurance Scheme for seawater suppliers and seafood traders in Hong Kong. The Scheme was launched in January 2006 after consultation with LegCo and the trade. The Hong Kong Productivity Council is appointed by the Government as the Accrediting Body to develop and implement the Scheme for a period of three years.

17. Under the Scheme, various stakeholders in the seafood trade can apply for two types of accreditation status. Seawater suppliers who abstract, treat, and/or deliver seawater/seafood can apply to become an Accredited Quality Seawater Supplier. An accreditation certificate will be issued to successful applicants. On the other hand, seafood restaurants and sales outlets that utilize seawater from Accredited Quality Seawater Suppliers or prepare their own synthetic seawater using marine salts and tap water, and Accredited Quality Seawater Suppliers can apply to become a Quality Seawater Logo Holder for the display of the Logo on their business premises. They will be audited by the Accrediting Body and will be granted accreditation status if they are found to comply with the accreditation criteria, which contain requirements on the source of seawater, fish tank filtration and disinfection systems, equipment cleansing and maintenance schedules, seawater sampling and analysis and the keeping of proper documentation and records.

18. To maintain their accreditation status, all accreditees have to undergo regular reassessment by the Accrediting Body to verify their continued compliance with the accreditation criteria. Any irregularities detected from an accredited operator will be recorded under a demerit point system, which will lead to suspension of accreditation status if the demerit points have accumulated to a specified limit. Serious non-compliances that have grave implication for public health, such as the presence of *Vibrio cholerae* in the seawater, will lead to immediate suspension of accreditation status.

19. As of end September 2006, a total of about 120 premises were accredited under the Scheme. These accredited facilities include seawater suppliers (the Fish Marketing Organization at Aberdeen, Cheung Sha Wan and Kwun Tong) and seafood wholesalers/retailers such as supermarket chains, seafood restaurants and sales outlets. There are about 50 applications pending accreditation at the moment.

ADVICE SOUGHT

20. Members are invited to note the measures to improve the quality of fish tank water as set out in this paper.

**Health, Welfare and Food Bureau
Food and Environmental Hygiene Department
5 October 2006**