立法會 Legislative Council

LC Paper No. CB(2) 467/01-02 (These minutes have been seen by the Administration)

Ref: CB2/PL/FE

LegCo Panel on Food Safety and Environmental Hygiene

Minutes of special meeting held on Wednesday, 5 September 2001 at 4:30 pm in Conference Room A of the Legislative Council Building

Members: Hon Fred LI Wah-ming, JP (Chairman)

Present Hon Tommy CHEUNG Yu-yan, JP (Deputy Chairman)

Hon James TO Kun-sun Hon WONG Yung-kan

Hon Jasper TSANG Yok-sing, JP

Dr Hon YEUNG Sum Hon SZETO Wah

Hon TAM Yiu-chung, GBS, JP Hon Michael MAK Kwok-fung

Dr Hon LO Wing-lok Hon IP Kwok-him, JP

Members : Hon Albert HO Chun-yan Absent Hon David CHU Yu-lin

Hon CHAN Yuen-han, JP

Hon SIN Chung-kai

Hon YEUNG Yiu-chung, BBS

Hon LAU Kong-wah Hon LAW Chi-kwong, JP

Hon Abraham SHEK Lai-him, JP

Hon WONG Sing-chi

Public Officers: Mrs Stella HUNG

Attending Deputy Secretary for the Environment and Food (A)

Mr David LAU

Principal Assistant Secretary for the Environment and Food (A) 2

Mr W H CHEUK

Deputy Director (Environmental Hygiene) Food and Environmental Hygiene Department

Dr Y Y HO

Consultant (CM)(RAC)

Food and Environmental Hygiene Department

Ms Winnie SO

Assistant Director (Headquarters)

Food and Environmental Hygiene Department

Mr S W WONG

Senior Superintendent (Licensing)

Food and Environmental Hygiene Department

Clerk in : Miss Betty MA

Attendance Senior Assistant Secretary (2)1

Staff in : Miss Irene MAN

Attendance Senior Assistant Secretary (2)9

Action

I Discovery of Vibrio Cholerae in fish tank water from food premises (LC Paper No. CB(2)2248/00-01(01))

At the invitation of the Chairman, the Deputy Director (Environmental Hygiene) of the Food and Environmental Hygiene Department (DD(EH)) briefed members on the current monitoring regime of seawater in fish tanks used in the keeping of live seafood and the efforts of the Food and Environmental Hygiene Department (FEHD) to explore ways for further improvement. He said that in response to a cluster of cholera cases associated with the consumption of seafood in 1998, a special inter-departmental working group was set up to examine ways to improve control over the hygiene quality of seawater in fish tanks used in the keeping of live seafood (fish and shellfish). The working group recommended that a surveillance and sampling system be introduced which was currently used by FEHD.

- DD(EH) said that since February 1999, all food premises and market stalls 2. selling live marine fish and shellfish for human consumption were required under FEHD's licensing and tenancy conditions to install filtration and disinfection equipment to purify the water. The Water Supplies Department (WSD) also took regular prosecution actions against the use of flushing water for other unauthorised use. To monitor the quality of fish tank water, FEHD collected water samples for E. Coli testing once every eight weeks to assess the hygienic condition of the food premises and the seafood market stalls. When samples for E. Coli were found to have exceeded the prescribed standard, further samples for E. Coli and Vibrio Cholerae testing would be collected. The surveillance for presence of Vibrio Cholerae constituted the second safety net in the monitoring of fish tank water. Normally at least two water samples for Vibrio Cholerae testing were collected from each operator every year with one being taken between June and August. The sample frequency was flexibly adjusted as circumstances required.
- 3. <u>DD(EH)</u> further said that under the food surveillance programme, food samples were taken at different levels including port of entry, wholesale and retail. An average of 60 samples of fish, shellfish, and high-risk ready-to-eat food, such as cold-served food, frozen confection and milk, were taken each month. Over the past two years, none of the samples taken were found to have been contaminated by Vibrio Cholerae.
- 4. <u>DD(EH)</u> added that FEHD had looked into measures to further ensure the fitness of seawater used in the keeping of live seafood. On the suggestion of establishing a licensing system to regulate the seafwater suppliers, the two former Municipal Councils had examined the proposal but found it not viable for the following reasons -
 - (a) the quality of seawater could not be constant given the long shoreline of Hong Kong and designating supply spots was not meaningful;
 - (b) there was no foolproof way to guarantee the quality of seawater at the different stages of extraction, transport, storage and delivery. It was also possible for contamination to occur after delivery; and
 - (c) having water supplied from a licensed supplier might give both the operators and consumers a false sense of security. They might assume that the water was safe and overlooked the inherent risks involved. In the event that water quality was found to be sub-standard in fish tanks, the question would arise as to whether the food premises operators or the water supplier should be held responsible.
- 5. As to the use of synthetic seawater, <u>DD(EH)</u> advised that FEHD had found it a preferred option. However, the correct use of synthetic seawater called for expertise on the part of the operator/user to monitor and control the water salinity. Even with the use of synthetic seawater, it was still necessary for retailers to provide adequate

disinfection and filtration facilities to safeguard water quality. Apart from that, there would be significant cost implications in using synthetic seawater, for example, it would cost about \$2,380 per month for a restaurant with five fish tanks. As such, FEHD did not advocate making the use of synthetic seawater a mandatory requirement for restaurants and market stalls.

6. <u>DD(EH)</u> pointed out 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 seawater. As specific standards had not been set to measure the effectiveness of the disinfection and filtration equipment, FEHD had commenced a review to assess the effectiveness of the commonly used ultra-violet filtration and disinfection systems and other new applications and technologies that had come into the market. The review was expected to be completed by the end of 2001 and recommendations would be put forward for consultation with the trade.

Surveillance and sample system

- 7. The Chairman noted from paragraph 12 of the Administration's paper that over 8 500 samples of seawater were taken from seafood restaurants and seafood market stalls for examination of E. Coli and Vibrio Cholerae in 2000. He asked for the respective samples collected for E. Coli and Vibrio Cholerae tests. He also sought clarification on whether Vibrio Cholerae might also exist in a sample which had not exceeded the E. Coli-specified limit and whether Vibrio Cholerae tests would be conducted only when water samples were found to have exceeded the E. Coli limit; if so, he was concerned that cases of Vibrio Cholerae contamination would be underestimated.
- 8. <u>DD(EH)</u> responded that the 8 500 samples were collected from 1 500 food premises with fish tanks for E. Coli or Vibrio Cholerae tests. As at least two water samples for Vibrio Cholerae testing were collected from each operator every year, it amounted to over 3 000 tests for Vibrio Cholerae. The existing sampling frequency was considered appropriate after striking a balance between the availability of resources and the number of cholera cases reported.
- 9. The Consultant (CM)(RAC) of Food and Environmental Hygiene Department (C(CM)(RAC)) added that E. Coli was an effective indicator of hygiene quality of fish tank water. Both E. Coli and Vibrio Cholerae testing were part and parcel of the surveillance and sampling programme in respect of seawater in fish tanks. Water samples exceeding the E. Coli-specified limit would be followed by the Vibrio Cholerae tests. Separately, water samples for Vibrio Cholerae testing would also be collected from food premises twice a year. If the water samples were found to have exceeded the E. Coli-specified limit, the samples might have been contaminated by Vibrio Cholerae as well. However, the probability of Vibrio Cholerae contamination was low if the presence of E. Coli did not exceed the prescribed standard.

- 10. While appreciating the effectiveness of the current surveillance system in discovering the presence of Vibrio Cholerae in fish tank water, Mr IP Kwok-him sought clarification about the difference in the frequency for taking water samples for E. Coli and Vibrio Cholerae testing, i.e. once every eight weeks and twice every year respectively.
- 11. <u>DD(EH)</u> explained that the two tests were conducted at different intervals because the tests for Vibrio Cholerae required more sophisticated laboratory set-up and expertise whereas E. Coli tests were comparatively simpler and easier to be conducted. He reiterated that once the E. Coli limit was found to have exceeded in a sample, a Vibrio Cholerae test would be followed.
- 12. Mr WONG Yung-kan pointed out that as shellfish bore a higher risk of Vibrio Cholerae contamination, the Administration should step up its surveillance programme in this respect. Mr WONG said that when seawater temperature went up from 20°C to 25°C in March, fish was likely to be infected with all kinds of diseases and the death rate also went up. Instead of collecting seawater samples for Vibrio Cholerae testing between June and August, he suggested that FEHD should start collecting samples in March when the seawater had already reached 25°C which was warm enough for the growth of bacteria.
- 13. <u>DD(EH)</u> responded that the inspection of disinfection and filtration systems for fish tanks in food premises was carried out by the Health Inspectors of FEHD under the food surveillance programme, which included monitoring the safety of shellfish for consumption. As shellfish and live marine fish were likely to be kept in seawater of the same source, the water quality in fish tanks was subject to FEHD's regular surveillance sampling.
- 14. On the taking of water samples for Vibrio Cholerae testing, <u>DD(EH)</u> explained that Vibrio Cholerae grew best in seawater that was warm. Hence, it was absolutely necessary for FEHD to collect water samples for Vibrio Cholerae testing between June and August. FEHD would also collect water samples in months other than June to August. Nevertheless, he undertook to consider Mr WONG Yung-kan's suggestion of collecting samples in March. <u>C(CM)(RAC)</u> supplemented that a risk-based surveillance scheme was adopted in fish tank water sampling. He assured members that the existing sampling frequency could sufficiently detect Vibrio Cholerae in fish tank water.

Measures to ensure the fitness of fish tank water

15. Mr WONG Yung-kan said that although all food premises and market stalls selling live marine fish and shellfish for human consumption were required to install filtration and disinfection equipment to purify the water, the Administration did not provide the trade with any objective standard and clear guidelines on how to properly maintain the disinfection and filtration systems for fish tanks. For instance, the trade

Admin

was unaware that an ultra-violet filtration system would remain effective only if it was used for not more than 3 000 to 4 000 hours. Having regard to the recent cases of discovery of Vibrio Cholerae in seawater in fish tanks, Mr WONG was of the view that it was of paramount importance for the Administration to adopt remedial measures to prevent the recurrence of such cases. Of the improvement measures put forward by the Administration, Mr WONG said that the trade considered that the use of synthetic seawater would give rise to more hygiene problem if the water salinity was improperly controlled. As such, the Administration should provide training for the operators and users to ensure that they were equipped with the knowledge and technical know-how to ensure its proper function.

- 16. <u>DD(EH)</u> said that the Administration was aware that specific standards had not been set to measure the effectiveness of the disinfection and filtration equipment. Hence, it had commenced a review to assess the effectiveness of the commonly used ultra-violet filtration and disinfection systems and other new applications and technologies, with a view to drawing up specific compliance standards for the trade. <u>DD(EH)</u> further said that consideration was given to providing training to the trade through the implementation of hygiene supervisor scheme.
- 17. The Chairman expressed dissatisfaction that although the requirement for using the filtration and disinfection equipment for keeping live seafood had been put in place for over two years, no specific standards to measure their effectiveness had been drawn up. In the absence of specific standards, he expressed doubt how the Health Inspectors carried out inspection of the filtration and disinfection facilities.
- 18. <u>Dr YEUNG Sum</u> said that although the installation of disinfection and filtration systems was one of the licensing/tenancy conditions for food premises and market stalls, the recent outbreak of cholera cases were found to be directly related to the quality of fish tank water. Given the serious water pollution problem in Hong Kong, he considered it not surprising to find the seawater samples would have exceeded the E. Coli limit. Having ruled out the suggestions of licensing of seawater suppliers and use of synthetic seawater, he commented that apart from imposing more stringent guidelines on the use of disinfection systems, the Administration had not taken any concrete measures to ensure the hygiene quality of seawater to safeguard public health.
- 19. Regarding the control of seawater supply, <u>DD(EH)</u> said that it was not viable to designate supply spots because there was no guarantee over the quality of water drawn due to natural variation and fluctuation of water quality because of heavy rainfall and direction of water flow, though seawater in the waters north and east of Hong Kong was of acceptable quality. In addition, taking enforcement against the drawing of seawater from non-designated supply spots would give rise to resource implications.
- 20. <u>DD(EH)</u> further said that given that there was only one case of discovery of Vibrio Cholera in fish tank water in 2000 and three such cases in 2001, the existing disinfection and filtration systems were proven effective. The Administration hoped

that after the completion of the review, it would be able to further improve the existing system, devise specific guidelines for the trade in using the system and explore new technologies that had come onto the market. He added that following the recent discovery of Vibrio Cholerae in fish tank water, the Administration had already received numerous local and overseas suggestions regarding the control of water quality in fish tanks. The viability of all the proposals would be examined during the review.

- 21. <u>Dr YEUNG Sum</u> remained unconvinced of the usefulness of conducting a review of assessing the disinfection and ultra-violet filtration systems. As the requirement for installing filtration and disinfection equipment had been introduced for more than two years and that Vibrio Cholerae was still discovered in fish tank water, the Administration should look into other measures to further ensure the fitness of seawater used in the keeping of live seafood.
- 22. <u>DD(EH)</u> pointed out that although there were three cases of Vibrio Cholerae found in fish tanks within a month, the rate of occurrence was still on the low side as compared with the 3 000 water samples being tested in a year. The problem was not serious. The review of the existing disinfection systems was to explore a simple and easy way for the trade to further ensure the quality of seawater in fish tanks. Moreover, the presence of Vibrio Cholerae in fish tanks did not necessarily imply an outbreak of cholera cases. Since thorough cooking could ensure the safety consumption of food, though contaminated by bacteria, FEHD had alerted the public's awareness of the importance of good personal hygiene and proper handling of uncooked food in summer.
- 23. <u>C(CM)(RAC)</u> stressed that the ultra-violet filtration and disinfection systems could effectively destroy bacteria in fish tanks and were proven effective and the most cost effective means for the trade. He emphasized that the disinfection systems only acted as a preventive measure while thorough cooking should be the ultimate safety net. He pointed out that when assessing the effectiveness of new applications and technologies in controlling the level of bacteria in fish tank water, FEHD would examine as to whether the equipment was applicable to the local situations, e.g. whether it would emit harmful materials in the process of disinfection and the risk of killing marine fish and shellfish.
- 24. Mr Tommy CHEUNG said that seawater in fish tanks could be contaminated in the delivery process. Besides, the personal hygiene of employees working in food premises and market stalls could contribute to the contamination of seawater in fish tanks after delivery. Since there were many factors leading to the growth of bacteria in fish tanks, the Administration should focus on examining ways to improve the efficiency and effectiveness of disinfection systems in destroying the bacteria in seawater. Hence, the seawater suppliers were of unanimous view that maintaining an effective disinfection and filtration system for the control of the quality of seawater in fish tanks was of utmost importance. He further said that since there were less than 10

companies engaging in the business of disinfection systems in Hong Kong, it should not be difficult for FEHD to convene a meeting for the parties concerned to work out how a more scientific research on the effectiveness of the different disinfection systems available in the market could be taken forward.

25. To ensure the quality of seawater used in keeping live seafood, Mr Tommy CHEUNG said that the trade had suggested to establish a centralised seawater treatment plant in which seawater was filtered, disinfected and tested before being delivered to food premises and market stalls for keeping live seafood. He further said that the Administration might consider rendering assistance to the trade by providing the venue for the proposed treatment plant so that the trade might draw seawater from places like Sai Kung where the quality was good for treatment and then deliver to restaurants and market stalls. DD(EH) agreed to look at the feasibility of the proposal during the review and liaise with the trade, if necessary.

26. Mr Tommy CHEUNG said that guidelines had been issued by the Administration since 1998 that drawing of seawater was prohibited in certain spots, such as Aberdeen, North Point and Wanchai. FEHD should also take the opportunity

to improve the relevant guidelines.

- 27. Mr Michael MAK said that he had seen people abstracting seawater along the coast in Lei King Wan where a sign was hoisted nearby indicating that the area was a "water abstracting site". He asked how the FEHD's guidelines on avoiding abstracting seawater from coastal waters was being enforced. He also asked whether FEHD had required operators to clean the fish tanks in food premises thoroughly at a regular interval.
- 28. Mr IP Kwok-him asked whether FEHD would consider conducting regular tests for waters of acceptable quality so that the fitness of the seawater so drawn for keeping live seafood could be ensured. In case any changes of water quality in these areas were noted, FEHD might be able to alert the trade in time and issue guidelines on appropriate follow-up actions.
- 29. <u>DD(EH)</u> responded that drawing seawater from coastal waters was not illegal. However, warning signs had been hoisted at locations where water was seriously polluted. Anyone abstracting seawater from those "black spots" would be tracked down by FEHD for follow up actions. In enforcing the guidelines, intelligence team from FEHD would carry out inspections in various popular seawater abstracting locations. However, the water samples collected from those locations seldom exceeded the E. Coli limit. In some recent cases, if the seawater was found to have been delivered to food premises and market stalls, FEHD would carry out immediate sample tests, but it did not find the E. Coli-specified limit was exceeded. <u>DD(EH)</u> said that sometimes the quality of water in those popular seawater abstracting sites might not necessarily meet the E. Coli-specified limit, it could eventually meet the prescribed standard for E. Coli if an effective ultra-violet filtration and disinfection

Admin

Action

Admin

equipment was installed in the food premises. As for the situation in Lei King Wan cited by Mr MAK, <u>DD(EH)</u> undertook to follow up the case. Regarding providing guidelines for the interval for thorough cleansing of fish tanks, the Administration would consider the proposal in the review.

- 30. Mr TSANG Yok-sing disagreed with the Administration that it was not viable to regulate seawater supply. FEHD seemed to convey a message that the quality of seawater in fish tanks could be properly maintained if an effective ultra-violet filtration and disinfection system was equipped. The source of seawater was not important, irrespective of whether it was taken from waters of good or bad quality. Mr TSANG said that FEHD should identify suitable locations for drawing seawater of acceptable quality, designating a water collection spot was not providing any guarantee to the public on the water quality but at least, FEHD would be able to focus its sampling and laboratory resources on the designated area. He considered that the variation of water quality was a natural phenomenon even in areas of good water quality. The possibility of contamination after delivery could be tackled by working out proper delivery arrangements. He commented that the Administration was refraining from its responsibility to ensure the safety of food intended for consumption.
- 31. <u>DD(EH)</u> responded that the Administration had practical difficulty in identifying suitable locations for drawing seawater and regulating the seawater suppliers, having regard to the fact that the delivery destinations might be distant from the designated supply spots. It was extremely difficult for FEHD to ensure that the suppliers would only draw water from the designated locations. As for the measures to ensure the quality of seawater in the delivery process, <u>DD(EH)</u> agreed that more safeguards could be provided at each stage, viz. drawing of seawater, delivery, and storage at food premises etc. However, the amount of resources to be put in should be commensurate with the gravity of the problem.
- 32. Mr TSANG Yok-sing sought clarification as to whether the Administration considered that the disinfection system was the ultimate safety net for safeguarding water quality; if so, the source for abstracting seawater was becoming unimportant and there would be no need to put in additional resources to ensure the quality of seawater throughout the delivery process. If this was not the case, it was necessary to establish a licensing system to regulate seawater suppliers to ensure the quality of seawater in the delivery process. If the suppliers had breached the licensing requirements, they should be liable to suspension of licences.
- 33. Mr IP Kwok-him remarked that the importance of the source of seawater should not be under-estimated. FEHD should consider enhancing the quality of seawater in fish tanks right from the source and throughout the delivery process.
- 34. <u>DD(EH)</u> said that the quality of seawater in fish tanks was the major safeguard for the fitness of seafood for consumption and the disinfection systems in fish tanks

were the most effective means to ensure the quality of seawater. However, it did not mean that the trade could draw seawater from anywhere if they so desired. Should the trade draw water from a very polluted location, such as Causeway Bay and Aberdeen typhoon shelters, it might pose high risk of contamination, in particular when the disinfection systems of the food premises were not effective. Nevertheless, he stressed that the quality of fish tank water was not the only source contributing to the discovery of Vibrio Cholerae in fish tanks. In fact, the fish itself might have already been infected while in the sea, or infected with cholera due to the poor hygiene conditions in market stalls or the fish tanks itself. As such, the licensing of seawater suppliers might not be able to tackle the problem thoroughly. He emphasized that the current surveillance system was effective as FEHD was able to detect Vibrio Cholerae in fish tank water during routine inspection, rather than upon notification of a cholera case.

- 35. <u>Dr LO Wing-lok</u> said that thorough cooking should be the ultimate safeguard to ascertain the safety of seafood for consumption. As a long term solution for the hygiene problem of seawater, he said that FEHD should either consider the proposal of establishing a centralised seawater treatment plant or promoting the use of synthetic seawater. He understood that the latter might not be appealing to the trade because of the technical expertise required and the cost implications. However, if bulk purchase for the equipment for using synthetic seawater could be arranged, the cost might be significantly reduced. He suggested the Administration to consider rendering assistance in this respect. <u>Dr LO</u> further said that he had received complaints against the use of flushing water for keeping live seafood in certain seafood outlets. He enquired about the gravity of the problem and preventive measures adopted by FEHD.
- 36. DD(EH) noted Dr LO's views. He advised that using flushing water for other unauthorised use was against the law. Since the introduction of the existing licensing/tenancy conditions for all food premises and market stalls selling seafood in February 1999, it was stipulated that the use of flushing water for keeping live sea fish was prohibited. During FEHD's inspection, Health Inspectors would specifically inspect the water pipe connection within food premises and market stalls to see if the licensing condition was breached. However, he admitted that it would be difficult to detect such cases if illegal connection were carried out during the renovation stage. Recently, FEHD had carried out a joint investigation with WSD after receiving a complaint case of the kind. The case was, however, unsubstantiated. Regarding the number of prosecution cases against using flushing water for keeping seafood, DD(EH) said that he would provide the information after the meeting.

Admin

37. Mr Tommy CHEUNG said that to his knowledge, using flushing water to keep live sea fish was no longer a common phenomenon in food premises and market stalls. Mr CHEUNG then pointed out that the trade did not consider synthetic seawater a preferred option, not only because of the cost consideration, but also due to the fact that there was no guarantee over the quality of seawater after using synthetic water. Other factors such as the personal hygiene of those working in food premises as well as the fish being infected with bacteria could have contributed to the water

contamination in fish tanks. In the end, the reliability of the disinfection systems and thorough cooking were the most important factors to safeguard food safety. Moreover, he pointed out that the use of synthetic seawater would have negative impact on the life span and appearance of fish.

- 38. Regarding the proposal on centralised treatment of seawater, <u>Mr Tommy CHEUNG</u> reiterated that the trade suggested to carry out a trial in Kwun Tong district as early as possible. The trade had indicated their willingness to take part in the trial and would be most willing to work out the details with the Administration. <u>Mr TSANG Yok-sing</u> also said that the feasibility of establishing a centralised seawater treatment plant might be further explored.
- 39. Mr WONG Yung-kan echoed Mr CHEUNG's view and said that the crux of the problem was that the quality of fish tank water was already polluted at source. The Administration should further consider how to monitor quality of seawater at source and improve the surveillance sampling. Mr WONG also pointed out that since the water keeping imported fish was no longer fresh after long hours of delivery, it should not be mixed with water in the local fish tanks all at a time lest it would increase the risk of bacteria growth. FEHD should issue guidelines for those employed in food premises and markets stalls in this regard.
- 40. <u>Dr LO Wing-lok</u> agreed that using natural seawater was more convenient and cheaper than using synthetic seawater for keeping live seafood as the use of synthetic seawater would require more technical knowledge and know-how to ensure the proper function. This could be solved by the provision of training. Moreover, he reiterated that if the technology of using synthetic water was widely adopted, the cost of purchasing equipment would be reduced substantially.

Recent cases of Vibrio Cholerae

- 41. Mr Michael MAK asked whether any of the 19 cholera cases discovered in this year were related to the three recent cases of discovery of Vibrio Cholerae in seawater in fish tanks.
- 42. <u>DD(EH)</u> advised that none of the 19 cholera cases was related to the three Vibrio Cholerae cases discovered in fish tanks. One of the Vibrio Cholerae cases was a case of investigation triggered upon notification of a cholera case.
- 43. In view of the discovery of three cases of Vibrio Cholerae in fish tanks where disinfection and filtration systems had been installed, the Chairman asked whether the investigation result had given any clue to the problem. DD(EH) advised that the first case involved a restaurant in Mongkok; according to the seawater supplier, the seawater had been drawn from Sai Kung where the water quality was good. This showed that designating supply spots could not guarantee the quality of seawater. The second case of Vibrio Cholerae took place in a licensed cooked food stall in Lok Wah

Action

Estate. The disinfection and filtration system was not properly maintained and the fish tanks were very dirty. In addition, the operator was a greenhorn in food business and lacked knowledge in maintaining fish tanks. The operator had ceased to sell seafood after the incident. The third case involved a seafood market stall in Sai Ying Pun where the disinfection and filtration system was properly maintained. The cause for discovery of Vibrio Cholerae was under investigation.

44. The Chairman said that Panel members were dissatisfied that there were still no objective and specific guidelines for the maintenance of disinfection and filtration systems used in fish tanks, notwithstanding that such requirements had been put in place for over two years. He considered it unacceptable that even the frequency of cleansing fish tanks was not included in the existing guidelines. He urged that the Administration should complete the review and issue the revised guidelines as soon as practicable.

Admin

45. To conclude, the Chairman said that FEHD should seriously consider members' suggestions of establishing a centralised seawater treatment plant on a trial basis, followed by a review of the effectiveness of the proposal, starting collecting water samples for Vibrio Cholerae testing from March and considering introducing legislation to prohibit abstracting seawater from typhoon shelters.

Admin

46. There being no other business, the meeting ended at 5:50 p.m.

Legislative Council Secretariat 15 November 2001