

**Advisory Council on Food and Environmental Hygiene**

**Minutes of the Forty Meeting  
Held at 2:30 p.m. on Thursday, 17 April 2008  
at Room 2005, 20/F, Murray Building, Garden Road, Central**

Professor YUEN Kwok-yung, SBS, JP	(Chairman)
Professor HO Wing-shing, John	
Professor HO Suk-ching, Sara	
Professor WU Shiu-sun, Rudolf	
Dr. TANG Shuk-ming, Winnie	
Dr. WONG Sin-ying, Lillian	
Dr. LO Chi-kin, JP	
Mr. KWOK Chun-wah, Jimmy, MH, JP	
Mr. LAU Yiu-fai, Ronald	
Mrs. Elizabeth MOK	
Miss LAM Wai-ling, Leona, JP	
Mr. FONG Wo, Felix, JP	
Miss LAM Chui-lin	
Dr. LO King-shun	
Mrs. Stella HUNG, JP	Permanent Secretary for Food and Health (Food)
Mr. CHEUK Wing-hing, JP	Director of Food and Environmental Hygiene
Miss CHEUNG Siu-hing, JP	Director of Agriculture, Fisheries and Conservation
Dr. LEUNG Ting-hung, JP	Head, Surveillance and Epidemiology Branch, Department of Health

## **Absent with Apologies**

Dr. YUE Kwok-to

Dr. Veronica LEONG

## **In Attendance**

### **Food and Health Bureau**

Ms. Olivia NIP, JP	Deputy Secretary for Food and Health (Food)
Mr. Francis HO	Principal Assistant Secretary for Food and Health (Food) <sup>2</sup>
Ms. Rhonda LO	Principal Assistant Secretary for Food and Health (Food) <sup>3</sup>
Mr. LIU Kim-man	Assistant Secretary for Food and Health (Food) Special Duties 3

### **Food and Environmental Hygiene Department**

Dr. Y Y HO	Consultant(Community Medicine) (Risk Assessment and Communication)
Dr. S Y LEE	Assistant Director (Food Surveillance and Control)
Mr. YUEN Ming-chi	Pest Control Officer in-charge
Mr. CHEUNG Wai-ying	Senior Superintendent (Cleansing & Pest Control)

### **Opening Remarks**

1. The Chairman welcomed Members to the meeting.

### **Agenda Item 1 : Confirmation of the Minutes of the Last Meeting**

2. Members confirmed the minutes of the last meeting without

amendments.

## **Agenda Item 2 : Matters Arising from the Minutes of the Last Meeting**

3. There was no matter arising from the minutes of last meeting.

## **Agenda Item 3 : Anti-mosquito Campaign 2008 (ACFEH Paper 03/2008)**

4. Mr. YUEN Ming-chi introduced the paper.

5. A Member supported the launch of campaign. She suggested that special attention should also be paid to old public housing estates where most of the residents were elderly.

6. A Member asked about the criteria and conditions for the pest control staff in selecting locations to place the ovitraps within the 18 districts across the territory. She believed that different ways and/or locations for placing ovitraps under different external factors, e.g. rainy seasons, might affect the effectiveness of ovitraps.

7. Mr. YUEN Ming-chi replied that about a hundred of ovitraps were placed in each district and the ovitrap index was provided on monthly basis. The locations for ovitraps were fixed each year. They were selected in accordance with the guidelines issued by the World Health Organization (WHO), e.g. areas with high population density such as schools and hospital areas. Ovitrap were not placed at natural breeding places of *Aedes albopictus* as those areas were being monitored under routine surveillance. They aimed at monitoring the situation of areas other than those with natural breeding grounds. Mr. YUEN added that the joint collaboration study with the Hong Kong Observatory (HKO) and the monthly surveillance by using Ovitrap Index were two separate plans. HKO provided information on the relationship between mosquito breeding and different weather parameters as well as what extent that the weather would affect mosquito breeding.

8. A Member expressed concern about press reports on tampering of ovitraps last year. She asked if the Food and Environmental Hygiene Department (FEHD) had taken measures to monitor the accuracy of Ovitrap Indices in a bid to restore confidence of the public. Mr. YUEN Ming-chi replied that the case had been referred to the Police for investigation. The Police had advised after investigation that there was a lack of evidence to proceed with prosecution. Mr. YUEN added the design of ovitraps had been improved by addition of a cover so that the chance of unintentional intervention

of the ovitraps in the course of routine mosquito preventive measures would be reduced. Apart from this, security tape was affixed on ovitraps to enhance security. Ovitrap with abnormality, e.g. a broken tape would be voided and replaced by a new round of ovitraps to obtain results for that area. Besides, Government Laboratory would be requested to analyse the water inside the ovitrap if there is any doubt of tampering.

9. A Member enquired if the high level of Monthly Ovitrap Index (MOI) recorded in July 2007 was caused by rainy weather or actually the MOI was incorrect. Mr. YUEN Ming-chi replied that the reason for high MOI was caused by light and intermittent rainfall during that period. Such pattern of rainfall was easy for water accumulation since there was not any flushing effect posed as compared to heavy rain. Inadequate preventive measures of water accumulation in housing estates at surface channels, manhole covers and small vessels also led to high MOI.

10. A Member remarked that effort had been successfully sustained by FEHD and relevant departments. FEHD should inform the public of the work done. She requested FEHD to pay particular attention to those illegal cultivated land where potential breeding might be formed. Mr. YUEN Ming-chi replied that FEHD had held a press conference after the incident in 2006 with a view to disseminating to the public the details on the improvement measures taken to reassure the reliability of the Ovitrap Index. Regarding illegal cultivation, especially those in close proximity to human residence, joint operations were conducted with the Lands Department from 2004 to 2006 by way of inspections, posting of posters and distribution of leaflets.

11. A Member said that there was noticeable improvement on the mosquito problem in 2007 as indicated in the MOI. Such improvement work should be released to the public including District Councils. He suggested that construction companies with bad records should be blacklisted for Government tender. The Administration should pay particular attention to roof tops of those private buildings which were without building management, and see if ovitraps should be placed there for monitoring purpose. Furthermore, control measures e.g. insecticide spraying, should be used at public places to achieve better results. Dr. Y Y HO responded that mosquito infestation at construction sites could be a problem. All along, the Development Bureau had a scheme in place to bar construction companies with bad records from bidding government projects. Further, names of the companies convicted of mosquito infestations had been released to the public through press release in the past. Regarding mosquito problems at roof tops of old tenement buildings, blitz operations had been conducted in between campaign periods so as to arouse public's awareness. Mrs. Stella HUNG indicated that the Food and Health Bureau (FHB) had

discussed the issue, especially on publicity work, with Home Affairs Department and other related departments during Steering Committee meeting held prior to the beginning of summer months. The effectiveness of the campaign could only be achieved with community's participation.

12. The Chairman asked if Diamond Hill was once included in the list. Mr. YUEN Ming-chi replied that high Area Ovitrap Index (AOI) had been recorded at Diamond Hill in the past. Investigation revealed that it was caused by accumulated water at manholes, nullahs and discarded articles found in the estates. Mosquito problem could be created in short time if the mentioned potential breeding ground had been neglected. Mr. YUEN admitted that some districts had recorded high AOI for continuing months.

13. A Member said that the Government had done a good job on this issue. He asked if the Government had kept any information on companies with repeated bad records and if the related penalty was stringent enough to pose deterrent effect. He further expressed that mosquito problem could be detected at high geographical level and bamboo scaffoldings and large leaves could be ideal breeding grounds. He enquired if there was any environmental friendly measure on mosquito prevention other than switching on air-conditioner. Mr. YUEN Ming-chi replied that local geographical environment, e.g. mountains and weather presented favourable and natural breeding grounds for mosquitoes. *Aedes albopictus* could fly horizontally to an extent of 100 metres and reached high level by a "fly and stop" manner. The best way of mosquito prevention was to eliminate potential breeding grounds, e.g. accumulated water, from the residence and its proximity. As mosquito was highly active at dusk, it was advisable to close windows in the evening to prevent its entry and re-open windows around 8-9 p.m. during which their activity was at the lowest level. Installation of mosquito curtain and mosquito net were also the recommended mosquito preventive measures.

14. A Member asked if the AOIs were only average figures and if residents of every district had knowledge about that. Mr. YUEN Ming-chi replied that 38 locations had been plotted within the 18 districts of the territory and detailed information could be obtained by browsing the FEHD website. MOI and AOI of over 20% of each location were announced through media on monthly basis. The AOI was calculated based on the number of collected ovitraps with positive *Aedes albopictus* larval breeding result.

#### **Agenda Item 4 : Prevention and Control of Rodent Problems in Hong Kong (ACFEH Paper 04/2008)**

15. Mr. YUEN Ming-chi introduced the paper.

16. A Member asked how the Rodent Infestation Rate (RIR) was calculated and how to ensure its accuracy and specificity. She also enquired the number of areas with RIR greater than 10% or 20% and whether similar rate for indication of rodent infestation was being used in other countries. Mr. YUEN Ming-chi replied that sweet potato had been using for census baiting. Its effectiveness had been confirmed since 1997 especially to sewer rats because of their omnivorous habit and special gnawing mark left on the bait which was different from other animals. Other foods could also be used as bait but less effective, e.g. apples which were too soft and turned rotten easily. RIR had been adopted since the set up of FEHD in 2000. The RIR of almost one third of the territory was greater than 10% in 2000 and there was noticeable improvement for the following 3-4 years. At present, there were only a few numbers of areas, occupied about one-tenth of the territory, with the RIR 10% or a bit greater than 10% but less than 20%. Rodent problem in the territory was believed to be more or less the same as other places or cities with similar stage and scale of development. The lower RIR was resulted from improvement in environmental condition and living standard by the Government, e.g. demolition of squatter areas and removal of pig farms from urban areas. The rodent problem at public places was under control in recent years, especially upon completion of the operation on demolition of illegal structures at rear/side lanes in 2003. Actually, rodent problem in public areas was largely under control and nowadays the problem was commonly found indoor, e.g. at false ceilings of shopping malls and offices.

17. A Member noticed that there was an increasing trend for the RIR in some districts in 2007, e.g. Sai Kung. She asked about the reason for the increasing trend and the recent rodent incident in Mong Kok. Mr. YUEN Ming-chi replied that a pilot study on establishing and maintaining rat-free villages had been conducted in 2005-06. Pamphlets had been issued to housing estates and building management for guidance on establishing and maintaining rat-free areas. The villages selected for the pilot study were not included under the RIR survey. Increase in RIR indicated that the rodent problem in those districts could not be neglected as the number of rodents might surge considerably within a short period of time for their high reproduction rate. Rodents problem could be found in new buildings as the pest might have gained entry to the buildings during their construction stage, or been carried into the buildings with construction equipment and materials as well as goods. Air ducts and false ceilings of shopping malls and offices also provided access and harbourages to rodents if rodent preventive measures were ineffective. Rodents would thrive in premises where harbourages, passages and food are available even if the premises are newly built.

18. A Member asked if the ascending RIR was only a statistical representation but not reflecting actual infestation condition. He further asked under what criteria should the locations be selected for placing baits and if action would only be taken in accordance with ascending figures but not actual ground situation. Mr. YUEN Ming-chi replied that baits were placed at selected localities which were either rodent spots or likely to have rodent problems. There were at intervals of at least 50 metres between two baits to cover a sufficiently large area, e.g. about 1/4 km<sup>2</sup>. Positive baiting points were then plotted on map after obtaining findings from baiting and district pest control staff would take follow-up action accordingly. Enhancement measures, including publicity, would be conducted with related sections of FEHD, e.g. Cleansing Section, if the RIR was high within an area covered by a 50-metres radius. Special rodent control operation would be implemented by a joint task force involving relevant government departments if the RIR maintained at high level.

19. A Member noticed that there was an upward trend in RIR of Tuen Mun and Yuen Long. She asked if the effectiveness of baiting was assessed by cumulative figures after a few months. She agreed that publicity and education activities should be enhanced, but information to the public on effective ways of rodent prevention were not included. She suggested rodent preventive measures should be enhanced by making reference to other countries/places. Mr. YUEN Ming-chi reiterated that follow-up action was taken by district pest control staff in accordance with findings reflected by RIR. Selected baiting localities were fixed for the census baiting in a year. The localities would be reviewed annually. Mr. YUEN explained that poisonous baiting with anti-coagulant was widely accepted as a more efficient and effective while safe method of rodent disinfection. The anti-coagulant was a chronic poison with vitamin K as antidote and hence lowered the degree of danger to other animals and children if contacted accidentally. However, it could not achieve the result in short time as cumulative effect could only occur in 4 to 5 days. FEHD had been working in close connection and consistency with WHO and other places and countries, including Mainland on pest control measures.

20. A Member asked if rat route (鼠路) was a more effective indicator of rodent infestation instead of map plotting. He opined that the importance of figure was insignificant in large districts as it could not indicate the real picture amongst sub-districts of large districts. Individual figures therefore should also be provided for sub-districts as well. He further asked why rodent prevention and control operations were only conducted during campaign period but not in a continuous manner. Mr. YUEN Ming-chi replied that rodents normally did not move to a distant locale by exposing themselves in open areas. It had reason to

believe that the recent rodent incident at Mong Kok was not related to Langham Place but the nearby fixed pitch stalls and food premises. Rat route could be indicated in terms of rat signs and rat run, etc. Follow-up action would be taken by pest control staff, by application of their professional knowledge, upon detection of rat route on rodent infestation. Selection of baiting localities was also based on rat routes detected. Hong Kong would never adopt rodent control measure by means of hooking as it was inhumane. Besides, the hooked rodent would create ultrasound which would alert other nearby rodents to render difficulties in coming operations.

21. Mr. CHEUK Wing-hing said that the powder used for rat route tracing (鼠踪粉) should be placed indoor instead of outdoor as its effect would be affected by rain or wind. The yield of caught rodent by means of trapping was high at the beginning but its effectiveness would be much lowered afterwards for their neophobic behaviour, odour adhered onto the traps and ultrasound so created. He agreed that publicity work should be enhanced, e.g. by appearance on TV programme, the opportunity of which would also be used to clarify incorrect news reports. Mr. CHEUK added that in the light of the recent public concern on rodent infestation, FEHD would advance the launch of the Enhancement Phase and extend the Campaign period with a view to allaying the concern of the public.

22. Dr. LEUNG Ting-hung said that there were different approaches and strategies in tackling rodent problems and Hong Kong should follow the universally accepted approaches and advanced methods. Improvement on environmental condition and segregation of rodents from human being were some of the strategies. Provision of rodent proofing measures, e.g. in pipe ducts of newly constructed buildings before moving in of residents would achieve the target of segregation to a great extent. Mr. YUEN Ming-chi said that they would do the best on segregation approach especially to the three species of commensal rodents. Proper rodent proofing measures, e.g. rodent guard, would result in keeping rodents from human residence.

23. A Member asked if the figures of RIR are indicator of staff's performance and how the figures, e.g. no. of rat holes destroyed and no. of rodents collected should be interpreted. Mr. YUEN Ming-chi replied that rat holes referred to those found at public places, e.g. public lanes. The downward trend on the number of rat holes destroyed was caused by the improvement of environmental condition of public places upon efforts paid by the related Government departments, e.g. removal of illegal structures at public lanes.

24. A Member said that methods of rodent catching should be adjusted in accordance with physical condition, e.g. by means of glue trap, which would

increase the effectiveness. Mr. YUEN Ming-chi replied that there were a number of choices in rat bait type. They would change the type of rat bait once they noticed its attractiveness to rodents had been lowered. There were limitations on using glue trap as adhesive power could not be ensured and only effective to small mice.

25. A Member said that quite a number of rat holes had been destroyed by the Team Clean in 2003 and the environmental condition was hence much improved. He appreciated the methods being adopted by FEHD on rodent control as they were humane. He agreed that it was nearly impossible to eliminate rodents and therefore we should aim at achieving the segregation of humans from rodents. He suggested that FEHD should cover private housing estates, especially those without property management, as selected areas for setting up baits. Besides, stringent control should be implemented on proper refuse storage at lanes or rodents would be attracted by the food debris but not the baits. He also asked if there was any device which would drive out rodents by means of ultrasound.

26. A Member also expressed appreciation to the high efficiency of the pest control staff of FEHD and agreed that they possessed sufficient professional knowledge. She had once lodged a complaint to FEHD on rodent infestation and the pest control staff did respond quickly by conducting site investigation and gave ample information and advice on rat sign and preventive measures respectively. She suggested that guidance on rodent prevention should be disseminated to the public during the Campaign and at the same time established a positive image of the pest control staff. A complaint hotline should also be provided.

27. A Member said that the provided figures were not meaningful to the public as they might not represent the true picture of the proximity of their residence. He added that the Government might consider methods on rodent prevention and control from folk wisdom and as well as come up with new ideas in the yearly campaign.

28. A Member said that the Government's rodent prevention and control seemed only restricted to rats but excluding mice. He asked if there was any research or monitoring on rodent borne diseases and zoonosis in Hong Kong, and the meaning of "prevent disease" under the slogan of the Anti-rodent Campaign 2008. He suggested more rodent prevention and control work should be done at rural areas.

29. In response to the members' questions, Mr. YUEN Ming-chi said that at present there had yet any effective ultrasonic rat repellents available at the

market because of their limitation on application. Shadow areas, e.g. window curtain, book shelves would affect the coverage effect and at the same time, frequent calibration was required to ensure its right wavelength. It was not recommended by FEHD as the positive approach was to rectify the rodent problem instead of repelling. Targets of the Campaign had included commensal rodents, i.e. rats and mice. RIR had covered areas with rodent harbourage and therefore could be used as an indicator of infestation condition. FEHD had paid attention on rodent-borne diseases such as plague and hantaviral disease. FEHD had collaborated with the University of Hong Kong on the study of infection of rodents with hantavirus. The study was underway. Collected dead rodents would also be dissected to see if there was any plague symptoms as well. It would be confirmed by means of bacterial culture if one or two symptoms of plague were shown. A Member said that the number of leptospirosis cases was increased in 2007 and was worthy of particular attention to it.

30. In response to the issue on leptospirosis, the Chairman expressed that flooding was a crucial factor on leptosiral infection which had been shown in large outbreak of other countries, e.g. Philippines. HKU's research revealed that leptospiral bacteria were commonly found in collected rodent's kidneys.

31. A Member said that FEHD should provide technical assistance and guidance (e.g. on rodent preventive measures) to licensees of food premises in tackling rodent problems. Mr. CHEUK Wing-hing replied that FEHD had issued advisory letters, with pamphlets enclosed, to all licensed food premises on proper storage of food debris, rodent prevention and control measures and penalty of offence. In conducting regular inspections to licensed food premises, Health Inspectors would pay particular attention to refuse storage.

32. A Member asked if rodents could be eventually eliminated and rodent population could be minimized by means of applying sterilization medicine or environmental protection sterilization spray. Mr. YUEN Ming-chi replied that the technique was still not available for application in the field though research work on this had been started many years ago. He opined that it would be intolerable to have a method allowing rodents to stay until they died after about 15 months "naturally" instead of eliminating them soonest possible.

#### **Agenda Item 5 : Summary of Recent Food Incidents (ACFEH Paper 05/2008)**

33. Dr. S.Y. Lee introduced the paper and members raised no question on this issue.

## **Agenda Item 6 : Any Other Business**

34. Mrs. Stella HUNG said that the relevant Amendment Regulation on nutrition labelling had been gazetted on 3 April 2008 and tabled at the Legislative Council (LegCo) for vetting on 9 April 2008. The House Committee had decided to form a sub-committee to study the Amendment Regulation on 11 April 2008. The trade was further requiring the Amendment Regulation should exempt those goods with nutrient-related claims from nutrition labelling with a small volume imports of 30 000. They also suggested to extend the grace period from two years to three years. Mrs. HUNG added that granting of exemption to pre-packaged food with claims could run contrary to the principle of the Amendment Regulation. The Administration's proposal in the Amendment Regulation was that all prepackaged food will be required to label energy plus six core nutrients and trans fat. The Amendment Regulation sought to strike a delicate balance between the consumers' right to information and food choices. She hoped the Amendment Regulation could be passed through LegCo as soon as possible for the interests of consumers.

35. There being no other business, the meeting adjourned at 4:30 p.m.

**Secretariat**

**Advisory Council on Food and Environmental Hygiene**

**Food and Health Bureau**

**April 2008**