Advisory Committee on the Quality of Water Supplies Minutes of Meeting No. 16

Date: 31 July 2007 (Tuesday)

Time: 2:00 p.m.

Venue: Conference Room, 48/F, Immigration Tower, Wan Chai, Hong Kong

Members Present	
Prof. HO Kin Chung	Chairman
Mr. CHAN Chi Chiu	Vice-Chairman, Director of Water Supplies
Mr. CHEUNG Yan Hong	Association of Engineering Professionals in
	Society Ltd.
Mr. LAW Wei Tak, Victor	The Hong Kong Federation of Electrical and
	Mechanical Contractors Limited
Dr. CHAN Hon Fai	Cinotech Consultants Limited
Prof. CHEN Yongqin, David	The Chinese University of Hong Kong
Ms LEE Yoke Shum, Sam	World Wide Fund for Nature Hong Kong
Dr. NG Cho Nam	The University of Hong Kong
Mr. CHAN Sheung Yan, Kenneth	Chun Lee Engineering Co. Ltd.
Ms HO Siu Fong, Betty	The Conservancy Association
Ms KWAN Miu Mei, Anita	Yau Tsim Mong District Council
Dr. WONG Chun Yu	The University of Hong Kong
Prof. YU Chai Mei, Jimmy	Friends of the Earth (HK)
Mr. HEUNG Yuk Sai, Norman	Chief Assistant Secretary, Development Bureau
Dr. CHIU Tak Lun, Michael	Deputy Director, Environmental Protection
	Department
Mr. SIN Kwok Hau	Assistant Director, Food and Environmental
	Hygiene Department
Dr. CHOI Hiu Yeung, Jacqueline	Senior Medical & Health Officer, Department of
	Health
Mr. POON Hin Tak, Bob	Environmental Hygienist, Department of Health
Mr. WONG Bay	Assistant Director, Housing Department
Mr. LIU Tso Wing, Jerry	Secretary, Senior Engineer, Water Supplies
	Department
Members Absent with Apologies	
Prof. TSO Wung Wai	The Chinese University of Hong Kong
Mr. WONG Kwok Hay, Samuel	Wong & Fok Solicitors
Mr. LIN Mark	Central and Western District Council
Ms WONG Choi Mei	Yuen Long District Council
	Tuen Long District Counter
In Attendance	
Mr. CHAN Kwong Wei, Samuel	Deputy Director, Water Supplies Department
Mr. NG Mang Tung, Bobby	Assistant Director, Water Supplies Department
Ms HO Suet Mei, Daisy	Chief Chemist, Water Supplies Department
Mr. TAM Yat Hung	Senior Engineer, Water Supplies Department
Mr. SUEN Kwok Keung	Senior Engineer, Water Supplies Department
Ms Karen KHAO	Director, Oracle Added Value

Item

- 1. The Chairman welcomed everyone for attending Meeting No. 16 of the Advisory Committee on the Quality of Water Supplies (ACQWS). He announced the following changes in membership of the ACQWS:-
 - <u>Dr. LEUNG Ting Hung</u> to replace <u>Dr. TSE Lai Yin</u> (who had retired) as the representative of the Director of Health;
 - <u>Mr. CHAN Yun Cheung</u> to replace <u>Mr. CHAN Shiu On</u>, <u>James</u> (who had been transferred to another post) as the representatives of the Secretary for Development; and
 - <u>Mr. SIN Kwok Hau</u> to replace <u>Ms LO Yuet Yee, Rhonda</u> (who had been transferred to another post) as the representatives of the Director of Food and Environmental Hygiene.

As <u>Dr. LEUNG Ting Hung</u> and <u>Mr. CHAN Yun Cheung</u> were not available to attend this meeting, <u>Mr. HEUNG Yuk Sai, Norman</u> had come on behalf of <u>Mr CHAN</u> as the representative of the Secretary for Development and <u>Dr. CHOI Hiu Yeung, Jacqueline</u> and <u>Mr. POON Hon Tak, Bob</u> had come to the Meeting in the place of <u>Dr. LEUNG</u> to represent the Director of Health.

- 2. The Chairman also welcomed <u>Ms Karen KHAO</u> of Oracle Added Value, the consultant who carried out the opinion surveys on quality of water in buildings 2006, to attend the meeting and give a presentation on the opinion surveys and the preliminary results.
- 3. Agenda Item 1 : Confirmation of Minutes of the Last Meeting
- 3.1 The draft minutes of the last meeting had been distributed to all Members before the Meeting and a hard copy of which had also been tabled. The minutes were confirmed without any amendment.
- 4. Agenda Item 2 : Matters Arising
- 4.1 Quality of Water in Buildings (ACQWS Paper No.19 Opinion Surveys on Quality of Water in Buildings 2006)

Fresh Water Plumbing Quality Maintenance Recognition Scheme (FWPQMRS)

4.1.1 Consultant presented to the Meeting the details of the background and methodology of the 2006 opinion surveys on quality of water in buildings and the survey results which had been distributed to Members before the Meeting in ACQWS Paper No. 19.

1.

three main approaches:-

proactive and

4.1.6

4.1.2 WSD informed the Meeting that the Working Group on Quality of Water in Buildings (WGQWB) discussed the above survey results on 5 July 2007 and had suggested that consideration be given to:-

(a) make it compulsory for the awardees to display the FWPQMRS certificates,

- (b) enhance promotion of FWPQMRS to customers, such as using pamphlets, providing assistance to the financial, technical and coordination aspects, and
- (c) target promotional approach at property management companies, Incorporated Owners & Mutual Aids Committees.

The WGQWB had also recommended posting the executive summary of the survey findings and charts in the ACQWS Paper No. 19 on the WSD's Internet website.

- 4.1.3 WSD then presented the trend of water quality complaints received and media coverage of water quality complaints between 2002 and 2006 and the average turbidity of water samples taken from buildings that had or had not joined the FWPQMRS. He also introduced to the Meeting the proposed new format of the FWPQMRS certificate and explained the difference between the design of the new certificate and the existing one.
- 4.1.4 In response to a Member's concern, WSD explained that the reason for not printing the full name of the building owners corporation in the new design was the limited space available in the certificate. However, he agreed to take on board the Member's suggestion by suitable adjustment of the font size.
- 4.1.5 A Member pointed out that public awareness was crucial to the success of the FWPQMRS. In this connection, promotion including advertisements should be strengthened. They might create an incentive to property management companies to participate in the Scheme. A Member said that the last WGQWB meeting had also discussed this issue and would take up the Member's suggestion accordingly. After some discussions, the Meeting recommended WSD to consider printing on water bills messages to prompt property owners to join the FWPQMRS in order to improve the customers' awareness.

A Member pointed out that timely building maintenance and regular inspections to the plumbing system were important to ensure good quality of water supplies to customers. He shared with the Meeting the experience of the Housing Department's (HD) Total Maintenance Scheme which comprised the following

comprehensive

inspections

to

identify

WSD

maintenance problems;

2. prompt response to emergencies and tenants' requests ; and

3. enhanced promotional and educational programmes. Under the Scheme, HD appointed "In-flat Inspection Ambassadors" to conduct home visits in public housing estates and carry out proactive in-flat inspections so as to identify any repair needs inside the flats and arrange for follow-up work as soon as possible. The ambassadors discussed the in-flat maintenance problems with the tenants and encouraged them to report promptly to the estate office. "Maintenance Education Booths" were set up in the estate to enhance tenants' awareness and maintenance knowledge. HD found that the Scheme was quite successful. WSD might consider a similar approach to increase the public awareness and promote a better image of the FWPQMRS.

- 4.1.7 A Member shared the other Member's view regarding to the appointment of inspection ambassadors. He pointed out that the Fire Services Department also operated a similar scheme with Fire Safety Ambassadors. The Vice-Chairman thanked Members for their comments on promoting the FWPQMRS and said that WSD would consider inviting volunteers to act as ambassadors and provide necessary training to them. Another Member further suggested that the ambassadors could be appointed by property management companies and trained by WSD.
- 4.1.8 A Member considered that the results of the opinion surveys were useful. In order to draw the public's attention that the objective of FWPQMRS was to improve the quality of water in buildings, she suggested adding the word "building" to the name of the Scheme. Another Members shared her views and commented that the name of FWPQMRS was in fact too long and complicated. They then recommended deleting the words "plumbing" and "maintenance" from the name. The Vice-Chairman agreed that WSD would take into account all their comments and review the name of the Scheme.
- 4.1.9 A Member pointed out that a lot of promotion activities for building maintenance including plumbing maintenance were organised by District Councils each year. She suggested WSD to provide more guidelines and assistance to the District Councils WSD in organising such promotion activities in particular on how to maintain good plumbing systems in buildings in order to supply good quality water.

WSD

WSD

Page 5

Action

- 4.1.10 In response to the Chairman's concern, the Vice-Chairman agreed WSD that WSD would study the results of the opinion surveys in detail, particularly for the lower satisfaction level of the quality of tap water for buildings aged between 10 and 20 years. WSD would treat these buildings as one of the major target groups for future promotion.
- 4.1.11 The Chairman suggested WSD to consider publishing the names WSD of buildings that had participated the FWPQMRS in WSD's Internet website as this might attract other buildings to join the Scheme.
- 4.1.12 A Member enquired if the property management company of a building, which had successfully participated in the FWPQMRS, could absolve its responsibility somewhat in the event of a water quality complaint. The Vice-Chairman explained that due to the complexity of the plumbing system within a building, a detailed investigation would normally be required to confirm the reason(s) for poor water quality for each case.
- 4.1.13 A Member further informed the Meeting that the pamphlet of the FWPQMRS would be revised to include assistance that would be provided to the applicant of the Scheme regarding financial, technical and coordination problems and the new name of the Scheme as the result of the review. WSD would send a promotion letter with the revised pamphlet to all property management companies and building owner corporations on the list provided by Home Affairs Department (HAD).
- 4.1.14 In response to the suggestion in the last meeting, WSD reported that e-application for the FWPQMRS had been established through WSD's Internet website. Applications could now be submitted through the internet to simplify the process and improve efficiency. He further pointed out that the application procedures were also simplified, namely, submission of the Business Registration Certificate would no longer be required and fewer copies of the water sample test results would be required upon the certificate renewal.
- 4.1.15 Regarding the Chairman's concern on further promotion of the Scheme, the Vice-Chairman said that WSD had been providing seminars each year to property management companies in promoting the FWPQMRS, among other water supply themes. WSD added that WSD had also participated in the seminars organised by HAD for the same purpose.

WSD

Item

- 4.1.16 The Chairman recommended WSD to consider providing more recognition and motivation to the property management companies under the Scheme. He suggested that WSD might consider issuing special recognition awards (such as different classes of certification) to the property management companies that had extended their certificates successfully for different lengths of time. The Vice-Chairman welcomed the suggestions.
- 4.1.17 A Member stated that Buildings Department would, in accordance with building regulations, issue a repair order to instruct building maintenance works to be carried out by the building owner where necessary. He suggested WSD might consider adopting a similar mechanism to require the maintenance to the plumbing system of buildings where necessary. The Vice-Chairman replied that WSD would only take legal action on those who had committed serious offences such as wasting or contaminating water. However, WSD would enhance the promotions of the FWPQMRS by using more advertisements and providing more training and advice to increase the public awareness.
- WSD
- 4.1.18 The Chairman thanked the Consultant for providing a clear presentation on the results of the opinion surveys on the quality of water in buildings 2006. He also thanked the Chairperson of WGQWB in recommending proposals to enhance the FWPQMRS.
- 4.1.19 The Meeting endorsed the recommendation stated in the ACQWS WSD Paper No.19 to upload to WSD's Internet website the executive summary of the opinion survey attached to the Paper.
- 4.2 Publication of Water Quality Data
- 4.2.1 The Chairman noted that the Working Group on Publication of Water Quality Data (WGPWQD) met on 28 May 2007 to discuss the latest water quality data to be published in the WSD's Internet website. He thanked the efforts of the Working Group chaired by Dr. CHAN Hon Fai, and asked WSD to report the progress on this item. WSD stated that the latest water quality data had been uploaded to WSD's Internet website in May 2007 covering the period from 1 April 2006 to 31 March 2007. The water quality data for samples taken in 2006 from the East Bank Section of Dongjiang's main stream near Taiyuan Pumping Station as provided by the Environmental Protection Bureau of Guangdong Province had been uploaded to WSD's Internet website in May 2007. For treated water, starting from 1 January 2007, WSD had adopted the new World Health Organization Guidelines for Drinking-water Quality (WHO 2004) for monitoring and full

compliance was achieved. For Dongjiang water, there was consistent improvement in quality after the commissioning of the dedicated aqueduct system. The next updating of the water quality data would be in November 2007.

- 4.2.2 A Member observed that the monitoring data of the maximum value of the Faecal Coliforms in Dongjiang water at Muk Wu Pumping Station had exceeded the standard value for GB3838-2002 Type II. WSD responded that, as advised by the Environmental Protection Bureau of Guangdong Province, it was probably due to the effects of heavy rainfall with surface runoffs and also the water storage project in progress. She added that the average concentration of E. coli during the period from April 2006 to March 2007 was 1200 no./L, which complied with the GB 3838-2002 Type II standard of 2000 no./L for Faecal Coliforms. She stated that WSD was fully capable of treating the Dongjiang water to ensure the compliance with WHO 2004.
- 4.3 Visit to Guangdong
- 4.3.1 WSD reported that the ACQWS had visited the Taiyuan Pumping Station, Shima River Sewage Diversion Works, Dongguan Zhangcun Water Purification Plants, Dongshen Water Supply Improvement Works Exhibition Centre, Shenzhen Reservoir Catchment Area Sewage Interception Works and Shenzhen Reservoir Bio-nitrification Plant in the last visit to Guangdong on 7 & 8 November 2006. Members noted the continuous efforts made by the Guangdong Authorities in protecting the quality of Dongjiang water. During the visit, Members also had the opportunity to meet senior officials of the Shenzhen Water Resources Bureau to exchange their experiences in protecting water resources and safeguarding water supply. A visit report prepared by WSD had been issued to all Members and posted in the WSD's Homepage.
- 4.3.2 WSD advised that it was intended to arrange the next visit in late November 2007. He then invited Members' suggestions on the spots to visit for the forthcoming visit. After some discussions, a Member and the Chairman remarked that it would be better to visit areas that could enable monitoring of the latest progress and development in protecting the water quality of Dongjiang.
- 4.3.3 The Vice-Chairman stated that WSD would arrange the visit in WSD collaboration with the Guangdong side taking into account the above suggestions. WSD would notify Members the details of the visit later through email.

4.4 Reclaimed Water Reuse Project at Ngong Ping

- 4.4.1 WSD reported that the pilot scheme on the use of reclaimed water at Ngong Ping had been commissioned in March 2006. WSD had employed a consultant to carry out a study on the review of the pilot scheme. The study included collecting useful information and statistics from the Ngong Ping pilot scheme for analysis. Based on the operational experience gained from the pilot scheme, the consultant would assess different aspects related to technologies, cost effectiveness and public acceptance for consideration on the wider use of reclaimed water in Hong Kong. The study would be completed by the end of 2008. The preliminary results indicated that the quality of the reclaimed water in general complied with the design standard.
- 4.4.2 WSD added that the consultant had employed the Public Opinion Programme of the University of Hong Kong to carry out the public opinion survey regarding the use of reclaimed water in Hong Kong. The first-stage of survey consisted of face to face interview of the patron of the toilets at Ngong Ping during 8 to 21 June 2007 regarding the use of reclaimed water for flushing. The preliminary analysis of the survey results showed that the majority of respondents accepted the use of reclaimed water for flushing. The consultant would submit the report for the first stage of opinion survey in August 2007. The second-stage of the opinion survey consisting of both face to face and telephone interviews would be carried out in mid 2008.
- 4.5 Pilot Desalination Plant Study
- 4.5.1 WSD briefed Members on the latest development of the pilot desalination plant study. The pilot plant operation at Ap Lei Chau had been completed in February 2007 and the final report for the pilot plant study was nearing finalisation and would be submitted in August 2007. According to the study, the feed seawater at Tuen Mun was less saline but there were greater variations in seawater characteristics. On the other hand, the feed seawater at Ap Lei Chau was more saline but relatively consistent in quality. Hence the operation of the plant at Ap Lei Chau had been more stable. The finished water from both Pilot Desalination Plants could satisfy the WHO Drinking Water Guidelines. Second pass reverse osmosis was tested at Ap Lei Chau for boron removal to achieve the WHO guideline of boron concentration of 0.50 mg/l. The preliminary estimated unit production cost of the finished water was about \$7.8 to \$8.4 per m³ depending on the type of pre-treatment process used.

Action

4.6 Water Safety Plan

- 4.6.1 WSD informed the Meeting that the Water Safety Plan (WSP) for WSD WSD had been developed according to the new requirements in the WHO 2004. WSD was seeking additional resources for its intended implementation.
- 4.6.2 The Chairman suggested to upload the WSP to the WSD's Internet website for public information. WSD welcomed the idea and the Vice-Chairman agreed that WSD would release a brief summary on the plan.

WSD

- 4.6.3 A Member asked whether the WSP included contingency plan for incidents that might occur resulting in reduction or shutdown of Dongjiang water supply. WSD replied that WSD was carrying out a consultancy on Total Water Management to achieve sustainable water resources, utilization and management plans for the future of Hong Kong in a cost-effective manner and the study would take into account this scenario. WSD added that WSP had made reference to other contingency plans developed by WSD in case of incidents.
- 4.7 **Public Education**
- 4.7.1 WSD reported that Ms CHEUNG Lai Ping, Lister had left the ACQWS and Ms LEE Yoke Shum, Sam had kindly taken over as the Chairperson of the Working Group on Public Education. Α meeting of the Working Group had been held on 23 November WSD had taken into consideration the suggestions 2006. recommended by the Working Group in planning and organizing public education activities. One of the suggestions was that a unique icon should be created for promoting water conservation. WSD would take up the idea in the Total Water Management Study. WSD then reported the various activities carried out by WSD to promote water conservation and the FWPQMRS, which included advertisements in TV, radio and public transport; promotional messages in water bills; water treatment works open days; roving exhibitions in the Central Library; FWPQMRS certificate presentation ceremony; waterworks seminar; and newspaper supplement on World Water Monitoring Day, etc.
- 4.7.2 In response to a Member's concern, WSD stated that WSD had invariably promoted the FWPQMRS in many activities including water treatment works open days and waterworks seminars.
- 4.7.3 Responding to a Member's enquiry, WSD explained that the programme of the coming waterworks seminar was being firmed

up and would include the promotion of FWPQMRS. He added that the target group of the seminar would be the property management companies in Hong Kong.

- 5. Any Other Business
- 5.1 No item was raised by Members.
- 6. There being no other business, the Meeting was adjourned at 4:20 p.m.