Advisory Committee on the Quality of Water Supplies
Minutes of Meeting No. 11

Date: 22 April 2004 (Thursday)

Time: 9:30 a.m.

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

Members Present

Mr. FANG Hung, Kenneth	Chairman
Mr. KO Chan Gock, William	Vice-Chairman, Director of Water Supplies
Ms. CHEUNG Lai Ping, Lister	The Conservancy Association
Prof. HO Kin Chung	Open University of Hong Kong
Mr. WONG Kwok Keung	Hong Kong Plumbing and Sanitary Ware Trade Association
Mr. CHEUNG Yan Hong	Association of Engineers in Society Ltd
Dr. LAM Ching Choi	Haven of Hope Christian Service
Mr. LAW Wei Tak, Victor	The Hong Kong Federation of Electrical and Mechanical Contractors Limited
Prof. CHEN Yongqin, David	The Chinese University of Hong Kong
Ms. CHEUNG Mui Seung, Emily	North District Council
Ms. LEE Ying, Robena	Tuen Mun District Council
Ms. LEE Yoke Shum, Sam	World Wide Fund for Nature Hong Kong
Dr. NG Cho Nam	The University of Hong Kong
Mr. WONG Kwok Hay, Samuel	Wong & Fok Solicitors
Dr. WONG Yee Him, John	Kowloon City District Council
Dr. NG Ping Sum, Sammy	Senior Medical & Health Officer, Department of Health
Dr. CHIU Tak Lun, Michael	Assistant Director, Environmental Protection Department
Ms. LO Yuet Yee, Rhonda	Assistant Director, Food and Environmental Hygiene Department
Mr. WONG Bay	Assistant Director, Housing Department
Mr. CHAN Shiu On, James	Principal Assistant Secretary, Environment, Transport and Works Bureau
Mr. LAU Chi Ming, Stephen	Secretary, Senior Engineer, Water Supplies Department

Members Absent with Apologies

Prof. TSO Wung Wai	The Chinese University of Hong Kong
Dr. CHAN Hon Fai	Cinotech Consultants Limited

In attendance

Mr. CHAN Chi Chiu	Deputy Director, Water Supplies Department
Mr. NG Mang Tung, Bobby	Assistant Director, Water Supplies Department
Mr. CHEUNG Tze Leung	Chief Chemist, Water Supplies Department
Mr. TAM Yat Hung	Senior Engineer, Water Supplies Department
Mr. SUEN Kwok Keung	Senior Engineer, Water Supplies Department

1. The Chairman announced that this was the first meeting of the third two-year term of the Advisory Committee on the Quality of Water Supplies (ACQWS). He welcomed all Members for attending the meeting, and in particular the new Members, including Prof. CHEN Yongqin, David, Ms. CHEUNG Mui Seung, Emily, Ms. LEE Ying, Robena, Ms. LEE Yoke Shum, Sam, Dr. NG Cho Nam, Mr. WONG Kwok Hay, Samuel and Dr. WONG Yee Him, John for attending the meeting of the ACQWS for the first time. He also welcomed Dr. NG Ping Sum, Sammy who stood in for the regular representative of the Department of Health, Ms. TSE Lai Yin, who was on leave at the moment. He then expressed thanks to the retired Members, viz Dr. CHEUNG Yun Hing, Richard, Prof. LAM Kin Che, Mr. WU Sai Him, Hugh, Ms. CHOW Kit Bing, Jennifer and Ms. CHUI Pui Man, Wendy for their contributions in the past.

2. The Chairman extended his welcome to the representatives from the Water Supplies Department (WSD) for attending the meeting and, in particular Mr. CHAN Chi Chiu and Mr. NG Mang Tung, Bobby, the successors to the Deputy Director of WSD, Mr. CHAN Pui Wah and the Assistant Director of WSD, Mr. KU Chi Chung, Damien since their retirement in April and March respectively, for attending the meeting of the ACQWS for the first time. The Chairman again expressed thanks to Mr. CHAN Pui Wah and Mr. KU Chi Chung, Damien for their contributions in the past.

3. As there were many new faces at the meeting, all participants took turns to introduce themselves round the table. After that, the Chairman briefly introduced the work of the ACQWS.

4. Agenda Item 1 : Confirmation of Minutes of the Last Meeting

The minutes were confirmed with the following amendment:

Page 1, List of Members Present
- "Mr. WAI Chi Shing" should read "Mr. WAI Chi Sing".

Page 7, Item 3.6, Line 7
- "study" should read "study report".

5. Agenda Item 2 : Matters Arising

5.1 Quality of water in buildings

Fresh Water Plumbing Quality Maintenance Recognition Scheme (Briefing Paper No. 1)

5.1.1 WSD reported the progress of the scheme in detail and that up to the mid-April 2004, about 1,300 certificates had been issued since the launch of the scheme in July 2002 and about 340,000 residential flats had been covered, representing 16% of the territory total. He thanked Housing Department (HD) for their full support. This support led to the majority of the 400 certificates being issued and 150,000 residential flats being benefited in the last three months. The Vice-Chairman and WSD also briefed Members on the background of the scheme and provided them with an information pack for the scheme.

5.1.2 The Chairman suggested putting more effort to encourage the developers to participate in the scheme for new buildings and to increase the participation rate. WSD advised that many developers were aware of the scheme and were keen to participate in the Scheme. The Vice-Chairman reiterated that the strategy was to focus on encouragement of customer participation in solving the water quality problems in buildings for about 3 to 4 years. He anticipated that with the full support of the Housing Department, the participation rate would increase significantly when more buildings from the public housing sector joined the scheme. This would then push the private sector to participate. WSD would later review the result of the scheme and if necessary, to consult the public for establishing mandatory requirements and enforcing through legislation to ensure quality plumbing maintenance.

5.1.3 A Member commented that the general public might still be hesitant to join the scheme as they had no idea of the costs involved, particularly laboratory testing charges. He added that the publicity work seemed to focus on large developments and that small developments and individual buildings should not be ignored. WSD reported that an information leaflet on costs involved in replumbing and maintenance of plumbing system had been prepared and would be distributed to the public for reference. A copy of the draft leaflet was distributed to Members at the meeting for reference. He thanked Mr. WONG Kwok Keung and the Buildings Department for providing cost data for the preparation of leaflet.

5.1.4 A Member added that normally the building management company would take up the maintenance responsibility after the 1-year building maintenance period from the contractor, and would then submit the application. (Post-meeting Note: WSD accepts applications from newly completed buildings and the applicants are required to produce water quality test results and undertakings to maintain plumbing and cleanse water tanks quarterly.)

5.1.5 Citing the example of the Hong Kong University of Science and Technology, a Member suggested that the frequency of cleansing and sterilisation of water tanks could be relaxed. WSD explained that it was intended to set a clear and simple maintenance guideline applicable to the public-at-large, and it was understandable that the guideline might not suit all consumers. HD emphasised the importance of regular cleansing of water tanks and commented that the 3-month requirement was a proven trade practice in the industry based on experience and any proposal for lengthening of the cleansing cycle had to be treated with caution. The Vice-Chairman commented that more flexibility in the requirement would call for more complicated monitoring and control activities by WSD. Under the present tight budget condition, no additional resources were available to handle the additional workload induced by the relaxation and thus it was not recommended to relax such requirement.

5.1.6 In response to an enquiry from a Member, the Vice-Chairman clarified that in general, village houses had no water tanks and the requirement for maintenance of water tanks would not be applicable to village houses. As long as the internal plumbing was up to standard, there would be no difficulties for village house owners to obtain certificates.

5.1.7 A Member suggested that the promotion campaign should place emphasis on feedback from users, not just government propaganda. The Vice-Chairman took the opportunity to encourage Members to speak up for support of the scheme in public.

5.1.8 A Member suggested that WSD should keep close liaison with developers and management companies of new buildings and urge them to submit the application as soon as possible. WSD assured that WSD would follow through the matter. WSD

5.1.9 A Member reiterated her earlier suggestion to promote the scheme at schools, as it would be more important and effective in the long run in achieving the result through correcting the students' perception of water quality. The Chairman supported that WSD should contact the Education Department to encourage all schools to join the scheme. WSD

5.1.10 Following the retirement of Prof. LAM Kin Che, the Chairman requested for the nomination of a new Chairman for the Working Group on Quality of Water in Buildings. Mr. WONG Kwok Keung accepted Members' nomination to be the Chairman of the

working group.

5.2 Publication of Water Quality Data

WSD informed that as an annual exercise, the Guangdong Environmental Protection Bureau provided WSD with water quality data of the Dongjiang mainstream in the vicinity of the Taiyuan Pumping Station for the year 2003 in February 2004. The data had already been published in WSD's Homepage on 1 April 2004 and indicated compliance with the Type II Standard of the Environmental Quality Standards for Surface Water GB3838-2002. He added that the Dongjiang Water quality as received in Hong Kong at Muk Wu Pumping Station and drinking water quality for the period from April 2003 to March 2004 would be published in May 2004. A meeting of the Working Group on Publication of Water Quality Data chaired by Prof. HO Kin Chung would be arranged in due course to scrutinize the data before publication. WSD

5.3 Publicity in the International Fresh Water Year

The Chairman acknowledged that WSD had already published the presentation materials and relevant details of the Youth Forum for International Fresh Water Year on the Homepage of ACQWS in January 2004.

5.4 Visit to Guangdong

5.4.1 WSD asked for Members suggestions on the visiting spots for the forthcoming visit in October. After some discussion, Members proposed to arrange a 2-day visit to Xinfengjiang, Huizhou Meilake Water Purification Centre, Taiyuan Pumping Station, the confluence of Dongjiang and Shima River, Comprehensive Wastewater Management Scheme for the Catchment of Shima River, Dongshen Water Supply Improvement Works Exhibition Centre at Jinghu and Bio-nitrification Plant in Shenzhen Reservoir. The Chairman encouraged all Members to join the visit to show their support.

5.4.2 A Member reiterated that the visit should be accompanied by reporters since it could help to clarify the misunderstanding and misconception about the quality of Dongjiang water supplied to Hong Kong. This could help to change the public misconception as well. She also volunteered to assist in arranging the visit, if necessary. Another Member commented that the Guangdong Authority was more open than before as they had agreed to host a delegation from the plumbing trade to visit the Dongjiang water supply system. He anticipated that the

Guangdong Authority would welcome such a proposal. The Chairman asked WSD to follow up with the Guangdong side regarding the proposal. WSD

5.5 Situation report on reclaimed water reuse project at Ngong Ping (Briefing Paper No. 2)

5.5.1 WSD briefed Members the latest development of the "Treated Effluent Reuse at Ngong Ping". He advised that MTRCL had requested further treatment of the reclaimed water before accepting its use in other uncontrolled uses, such as floor cleansing and irrigation, in the cable car development. Correctional Services Department also agreed to consider the use of the reclaimed water in the staff quarters of the Shek Pik Prison for flushing and irrigation. Leisure and Cultural Services Department expressed that subject to further treatment, they would consider using the reclaimed water for irrigation and floor cleansing in the proposed piazza at Ngong Ping. WSD would continue to explore other possible uses of the reclaimed water and to carry out cost-benefit analysis for further treatment of reclaimed water for other uses. WSD

5.5.2 In response to the Chairman's query about the quality standard of the reclaimed water, WSD advised that the quality standard of the reclaimed water had not yet been finalised.

5.5.3 Environment, Transport and Works Bureau supplemented that another small scale trial reclaimed water reuse project at Shek Wu Hui Sewage Treatment Works was being considered. The Environmental Protection Department (EPD) would be the lead department with contributions from the Drainage Services Department, WSD and other departments as appropriate. A review would be carried out based on the results of the two trial reclaimed water reuse projects to determine the strategy on wider use of reclaimed water.

5.6 Situation report on desalination pilot plant study (Briefing Paper No. 3)

5.6.1 WSD briefed Members the latest development of the desalination pilot plant study. He advised that the $10-million contract for the supply, installation and operation of the desalination pilot plant was awarded to the ATAL Engineering Limited and started in February 2004. There would also be separate contracts for water sampling and laboratory testing. He reiterated that the pilot plant study report would be available near the end of 2004.

5.6.2 Mr. LAW Wei Tak, Victor declared that though he was working in

the ATAL Engineering Limited, he was not involved in the aforesaid desalination pilot plant study project at any stages.

5.7 Misleading advertisements for water purifiers

WSD reported that the Hong Kong Post had no record of the identity or address of the sender of normal post items and was unable to provide assistance in identifying the details of the promoter of the leaflet on "The Truth of Tap Water". Regarding the reference to the research work of the City University of Hong Kong, the retired Member, Dr. CHEUNG Yun Hing, Richard had retrieved a news report in 1999 about the research work of the university referred to in the leaflet. However, the findings quoted in the leaflet were not found in the news report.

6. Any Other Business

6.1 Report by Greenpeace on Dongjiang Water Quality

6.1.1 The Chairman advised that the recent report by Greenpeace on Dongjiang water quality (the Report) in April 2004 had attracted much attention of the public. A Member advised that he had visited Dongjiang twice recently and observed a slight reverse flow of the discharge from Shima River upstream along Dongjiang towards the intake of Taiyuan Pumping Station. He believed that the change in the hydraulic condition was attributed to the prolonged dry weather and the dredging activities in the vicinity. He had tried to explain to the reporters that no reverse flow was observed in a flow test conducted by a delegation of the ACQWS in 2001 and advised them that the pollutants from Shima River would immediately be diluted by the massive volume of water in the Dongshen water supply system and that the incident would become history as soon as the discharge from Shima River was diverted away from Dongjiang after summer. In view of the media concern, he suggested that the Guangdong Authority should consider implementing the various pre-identified contingency measures, such as releasing more water from Xingfengjiang to increase the downstream flow of Dongjiang.

6.1.2 The Vice-Chairman elaborated that the flow test in December 2001 was conducted in the dry season at a comparatively adverse flow condition, though not the extremely adverse flow condition. He questioned that the video shown on the television did not capture the scene that the ball from Shima River turned upstream really flowed into the intake of Taiyuan Pumping Station. He believed that even if some discharge from Shima River entered the intake, it would only have a very minor effect on the quality

of Dongjiang water supplied to Hong Kong when compared with the situation before the commissioning of the entire closed aqueduct system that all discharges from Shima River were mixed with the Dongjiang water supplied to Hong Kong and Shenzhen. He also noticed that the water sampling point shown in the video appeared to be within the Qiling section of Shima River, a long way upstream of its confluence with Dongjiang. Anyway, the water quality there had little bearing on the quality of Dongjiang water supplied to Hong Kong.

6.1.3 A Member commented that under the present drought condition (roughly a 50-year event), together with the impact of dredging, it would not be surprising to encounter a certain degree of impact on the flow pattern of rivers in the Pearl River Delta.

6.1.4 WSD emphasised that it was most important that the quality of Dongjiang water received at Muk Wu Pumping Station was closely monitored by WSD. He tabled a paper giving response to the Report and the relevant laboratory test results of the water samples obtained in Hong Kong at Muk Wu Pumping Station for Members' reference. He explained that the results indicated that in March 2004, the quality of Dongjiang water received in Hong Kong was far better than that reported by Greenpeace and the results also supported that there were significant improvement in the quality of Dongjiang water after the commissioning of the entire closed aqueduct system. He also contested Greenpeace's proposal to obtain water directly from Xinfengjiang Reservoir as the reservoir was a source of water supply to areas downstream, not just Hong Kong and Dongguan, and the proposal would jeopardize navigation along Dongjiang.

6.1.5 A Member commented that it appeared that WSD was rather late in responding to the Report, two days after the release of the Report, and hence lost the opportunity to defend against the accusations. She suggested that WSD and ACQWS could do more publicity works to correct the misconception of the general public that drinking water quality was directly related to raw water quality and hence deterioration in raw water quality equaled to deterioration in drinking water quality. She also suggested that WSD should be more proactive in public relations rather than just responding to adverse or misleading news reports or advertisements after they arose.

6.1.6 The Chairman commented that the Report had already damaged the image of the work of WSD and the Guangdong side. He also noticed that the newspapers gave prominent coverage of the Report but little coverage of WSD's response. He opined that instead of responding further to the Report, it would be more

desirable and effective to make use of the forthcoming visit by bringing some reporters to help them tell the public the true picture on the Guangdong side.

6.1.7 The Vice-Chairman responded that when he received advanced notice of the Report, he had immediately instructed the Public Relations Unit to respond quickly. He was, however, disappointed that as mentioned earlier by the Chairman, the Report was given good coverage while WSD's response on the same day poor coverage. In this connection, WSD conducted a press conference 2 days later to explain the case with more details.

6.1.8 WSD supplemented that during the press conference, he had distributed the above-mentioned paper giving response to the Report and the laboratory test results of the water samples obtained in Hong Kong at Muk Wu Pumping Station for the reference of reporters present. He noted that the interview was given a rather prominent coverage but was still small when compared with the coverage of the Report. He agreed that instead of responding further to the report, more proactive public relations work should be done in the future.

6.1.9 EPD pointed out that Greenpeace had not elaborated on how they handled and stored the water samples collected. Without proper handling and storage, the quality of water samples would deteriorate during the whole process, for example, the bacteria count might escalate several times before reaching Hong Kong. He opined that there was no need and it was not worthwhile to argue with Greenpeace, which might require extra resources. On the other hand, it would be advisable to build up the image and credibility of the ACQWS.

6.1.10 A Member commented that in the eyes of the public and media, academics were generally more credible and authoritative than the Government. For the sake of public relations, he suggested that maintaining good communication with relevant academics would be useful as the academics could help to give fair comments on related issues to the media.

6.1.11 A Member observed that in some countries, people drank water directly from the tap without any promotion by the local government. He suggested that it would be advisable to compare the drinking water quality in these cities with that in Hong Kong.

6.1.12 The Chairman raised and Members supported that a working group comprising 3 to 5 Members should be established to handle WSD

public relations works. Ms. CHEUNG Lai Ping, Lister accepted the nomination to chair the working group.

6.2 Drinking Water Quality Index

6.2.1 A Member raised whether it would be helpful to establish a simple drinking water quality index, based on colour, clarity and bacteria count, to facilitate the public to understand the quality of drinking water. WSD responded that drinking water quality was in fact related to over a hundred health and aesthetic parameters, each of which has different impact on public health. It was not possible to describe drinking water quality using one single number.

6.2.2 EPD added that air quality indices could be computed based on the on-line monitoring of several air quality parameters. However, water quality sampling and testing was much more complicated. It would be a lot more difficult and complicated to establish a drinking water quality index than an air quality index.

6.2.3 A Member commented that the proposed water quality index might not be practical since water quality must always be good enough for human consumption. He advised that treatment of ambient air mixed with pollutants was practically impossible, but water contaminated to some degree could always be treated to meet the drinking water quality standards. In other words, while we made every effort to improve the Dongjiang water quality, variations in source water quality were unavoidable, but drinking water quality could always be ensured to meet the standards.

6.2.4 A Member supplemented that there were various environmental indices for river and surface water quality in the world but drinking water should be treated to a standard that would be fit for healthy consumption. Therefore, using a composite index to reflect the quality of drinking water was not appropriate.

6.3 Double-sided printing

The Vice-Chairman agreed with a Member's suggestion that to save paper, future handouts and meeting documents should be double-sided copies. WSD

6.4 Dredging along Dongjiang

A Member pointed out that he observed that the dredging activities along Dongjiang was quite serious and had lowered the level of the riverbed, and this would increase the risk of seawater ingress and the salinity of the Dongjiang water in the long term.

The Vice-Chairman responded that dredging was an ongoing threat, which had caused the relocation of the Dongjiang water intake three times in the past. WSD assured that WSD would reflect Members' concern to the Guangdong side for follow-up actions. WSD

6.5 Details of Dongjiang Water Supply System

A Member said that the above discussions mentioned a lot about the details and places of the Dongjiang water supply system. She therefore requested WSD to forward the details of the system for the reference of new Members. WSD

7. There being no other business, the meeting was adjourned at 12:20 p.m.