

Advisory Committee on the Quality of Water Supplies
Minutes of Meeting No. 14

Date: 26 April 2006 (Wednesday)

Time: 3:00 p.m.

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

Members Present

Prof. HO Kin Chung

Mr. CHAN Chi Chiu

Mr. CHEUNG Yan Hong

Mr. LAW Wei Tak, Victor

Prof. TSO Wung Wai

Dr. CHAN Hon Fai

Prof. CHEN Yongqin, David

Ms. LEE Yoke Shum, Sam

Dr. NG Cho Nam

Mr. WONG Kwok Hay, Samuel

Mr. CHAN Sheung Yan, Kenneth

Ms. HO Siu Fong, Betty

Ms. KWAN Miu Mei, Anita

Ms. WONG Choi Mei

Mr. YU Chai Mei, Jimmy

Mr. CHAN Shiu On, James

Dr. CHIU Tak Lun, Michael

Ms. LO Yuet Yee, Rhonda

Dr. TSE Lai Yin

Mr. WONG Bay

Mr. LAU Chi Ming, Stephen

Chairman

Vice-Chairman, Director of Water Supplies
Association of Engineering Professionals in
Society Ltd.

The Hong Kong Federation of Electrical and
Mechanical Contractors Limited

The Chinese University of Hong Kong

Cinotech Consultants Limited

The Chinese University of Hong Kong

World Wide Fund for Nature Hong Kong

The University of Hong Kong

Wong & Fok Solicitors

Chun Lee Engineering Co. Ltd.

The Conservancy Association

Yau Tsim Wong District Council

Yuen Long District Council

Friends of the Earth (HK)

Principal Assistant Secretary, Environment,
Transport and Works Bureau

Deputy Director, Environmental Protection
Department

Assistant Director, Food and Environmental
Hygiene Department

Consultant, Department of Health

Assistant Director, Housing Department

Secretary, Senior Engineer, Water Supplies
Department

Members Absent with Apologies

Mr. LIN Mark

Dr. WONG Chun Yu

Central and Western District Council

The University of Hong Kong

In attendance

Mr. CHAN Kwong Wei, Samuel

Mr. NG Mang Tung, Bobby

Ms. HO Suet Mei, Daisy

Mr. TAM Yat Hung

Deputy Director, Water Supplies Department

Assistant Director, Water Supplies Department

Chief Chemist, Water Supplies Department

Senior Engineer, Water Supplies Department

1. The Chairman announced that this was the first meeting of the fourth two-year term of the Advisory Committee on the Quality of Water Supplies (ACQWS). He felt proud that he was nominated by the government to be the Chairman of the ACQWS. He hoped that all Members could work together with him as a team and would support the work of the ACQWS.
2. The Chairman expressed special thanks to the retired founding Chairman, Mr FANG Hung, Kenneth, who laid a solid foundation of the ACQWS, and the other six retired Members including, Ms. CHEUNG Lai Ping, Lister, Mr. WONG Kwok Keung, Dr. LAM Ching Choi, Ms. CHEUNG Mui Seung, Emily, Ms. LEE Ying, Robena and Dr. WONG Yee Him, John for their contributions in the past.
3. The Chairman welcomed all Members for attending the meeting, and, in particular, the five new Members, including Mr CHAN Sheung Yan, Kenneth, Ms. HO Siu Fong, Betty, Ms. KWAN Miu Mei, Anita, Ms. WONG Choi Mei and Mr. YU Chai Mei, Jimmy for attending the meeting of the ACQWS for the first time.
4. The Chairman extended his welcome to the representatives from Water Supplies Department (WSD) for attending the meeting and in particular Mr. CHAN Chi Chiu, the successor to the Director of Water Supplies, Mr. KO Chan Gock, William since his retirement in January 2006, and Mr. CHAN Kwong Wei, Samuel, the successor to the Deputy Director of Water Supplies, Mr. CHAN Chi Chiu since January 2006. The Chairman again expressed thanks to Mr. KO Chan Gock, William for his contributions in the past.
5. As there were many new faces at the meeting, all participants took turns to introduce themselves round the table.
6. The Chairman reminded Members of the declaration system introduced by the government in order to promote the image and credibility of Public Councils, Boards and Committees. All Members should familiarize and comply with the requirements stipulated in the guidelines forwarded to them prior to the meeting regarding the general principles, potential conflict of interest situations and requirements on declaration of interests at meetings. After that, the Chairman briefly introduced the establishment and the work of the ACQWS.
7. Agenda Item 1 : Confirmation of Minutes of the Last Meeting

The minutes were confirmed without any amendment.

Item		Action
8.	Agenda Item 2 : Matters Arising	
8.1	Quality of water in buildings	
	Fresh Water Plumbing Quality Maintenance Recognition Scheme	
8.1.1	<p>WSD briefly introduced the background and development of the Fresh Water Plumbing Quality Maintenance Recognition Scheme. He reported that up to March 2006, a total of about 4,400 certificates had been issued since the launch of the Scheme in July 2002 and the number of valid certificates was about 1,600, which covered about 450,000 residential flats, representing 19% of the territorial total.</p>	
8.1.2	<p>WSD advised that in the last meeting, the ACQWS endorsed the proposal for WSD to conduct two opinion surveys to assess the impact of the Scheme, as interpreted by the customers and building management companies, to gauge public opinions on water quality in buildings and to review the Scheme. He reported that tenders for the opinion surveys were invited and anticipated that the contract for the opinion surveys would commence in May/June 2006. The draft questionnaires would be ready by July 2006 for reference and comment of the Working Group on Quality of Water in Buildings (WGQWB) prior to the opinion surveys. A draft report would be prepared and submitted to the WGQWB by end 2006/early 2007. He added that 3 meetings of the WGQWB had been arranged and Members' comments were incorporated in the tender documents.</p>	<p>WSD</p> <p>WSD</p>
8.1.3	<p>WSD reported that a paper was under preparation on a proposal to extend the validity period of the certificates to two years for discussion in the forthcoming meeting of the WGQWB.</p>	WSD
8.1.4	<p>A Member commented that the figures presented did not show the trend or progress of the Scheme as the number of certificates issued each year was not presented. The Chairman suggested WSD to compile the necessary figures and carry out a detailed analysis for the reference of Members in the next meeting.</p>	WSD
8.1.5	<p>A Member reiterated that in view of the heavy financial burden of renewal of certificates, the Housing Department (HD) would only renew the certificates of the public housing blocks every 3 years. Notwithstanding this, he reassured that HD fully supported the Scheme and was committed to good water quality. Even without the certificates, HD would do its best to maintain plumbing systems to ensure good quality water supply to tenants. He</p>	

Item	Action
added that HD had about 1050 public housing blocks and had already obtained a total number of 801 certificates under the Scheme. He assured that HD would review its resources and the strategy of renewal of certificates from time to time. He further advised that HD was replacing the old galvanised iron water pipes inside public housing estates and the replacement works for about 700 blocks had already been completed. The works for the remaining 150 blocks had been planned to complete by 2010/11.	HD
8.1.6 A Member enquired if the water quality data collected through the Scheme could be used to compare the quality of water in different districts in Hong Kong. The Chairman suggested that this enquiry could be dealt with by the WGQWB.	WGQWB
8.1.7 Since <u>Mr. WONG Kwok Keung</u> , the Chairman of the WGQWB, had retired from the ACQWS, the Chairman invited volunteers or nominations for the chairmanship of the WGQWB. The Vice-Chairman nominated <u>Mr. CHAN Sheung Yan, Kenneth</u> to be the Chairman of the WGQWB. All Members supported and <u>Mr. CHAN</u> accepted the nomination to chair the WGQWB.	
8.2 Publication of Water Quality Data	
8.2.1 WSD reported that to promote transparency of information to the public, WSD had been publishing the water quality data for Dongjiang water received in Hong Kong at Muk Wu Pumping Station and for drinking water in the Internet via WSD's Homepage two times each year. The latest data published in the Internet in November 2005 was the 10 th publication covering the period from 1 October 2004 to 30 September 2005. Full compliance with the Guidelines for Drinking-water Quality published by the World Health Organisation (WHO) in 1993 was achieved. She added that the quality of Dongjiang water received in Hong Kong had improved significantly after completion of the dedicated aqueduct system in June 2003 and had been stabilized. The forthcoming updating of the water quality data would be arranged in May 2006. A meeting of the Working Group on Publication of Water Quality Data (WGPWQD) would be arranged to scrutinize the data prior to publication. The water quality data for samples taken in 2005 from the East Bank Section of Dongjiang's main stream near Taiyuan Pumping Station provided by the Environmental Protection Bureau of Guangdong Province had also been updated in WSD's Homepage in March 2006.	WSD
8.2.2 A Member suggested that the substantial improvement in the Dongjiang water quality after commissioning of the dedicated	

aqueduct system should be announced to the public through the media. **WSD** replied that a press conference had already been arranged after the last visit to Guangdong in November 2005 to report the situation to the public through the media. The Chairman added that WSD had presented the quality data of Dongjiang water in graphical form, which helped the public understand the trend or changes more easily.

8.2.3 **A Member** asked if there were still enormous public enquiries on the water quality issues. **WSD** responded that since the publication of the water quality data in the Internet, WSD received far fewer enquiries concerning water quality issues.

8.2.4 The Chairman advised that he had been the Chairman of the WGPWQD since its formation in 2003. He opined that as he was now the Chairman of the ACQWS, it would be desirable to appoint another Member to take up the aforesaid role. He asked if there was any volunteer or any nomination from Members for the chairmanship of the WGPWQD. After some discussions, **a Member** nominated Dr. CHAN Hon Fai to take up the Chairman's role of the WGPWQD. All Members supported and Dr. CHAN accepted the nomination to chair the working group.

8.3 Visit to Guangdong

8.3.1 **WSD** reported that the ACQWS had visited the three major reservoirs along Dongjiang, viz. Fengshuba Reservoir, Xinfengjiang Reservoir and Baipenzhu Reservoir in the last visit in November 2005. A visit report had been prepared by WSD and in January 2006, was issued to all Members and published in the Internet. A copy of this report had been distributed to all new Members in the meeting for their reference. He advised that it was proposed to arrange the next visit around September or October 2006.

WSD

8.3.2 **A Member** suggested visiting the Water Bureau and possibly other related organizations in Shenzhen to learn about their mode of operation and experiences in reforming urban water supply services. He also suggested discussing the salinity intrusion problem along Dongjiang with the Guangdong Authorities during the visit. The Chairman suggested that we could visit again the exhibition centre for the dedicated aqueduct system to let the new Members understand more about the history and development of Dongjiang water supply to Hong Kong. Most Members agreed that the visit should last for two days rather than three days to enable those who could not afford the longer time to join. The Chairman also commented that Members would be eager to go

Item		Action
	home after the visit and the press conference, and hence there would be no need to arrange a dinner in Hong Kong afterwards as was hitherto the practice. The Vice-Chairman would arrange the visit in collaboration with the Guangdong side taking into account the above suggestions and the response of the Guangdong side.	WSD
8.3.3	A Member pointed out that from past experience, media reports for the visits usually focused on other hot topics or issues concerning water supply, which might attract readers or audiences, rather than the visits alone. The Chairman and some Members suggested that the Public Relation Unit of WSD should prepare a list of hot topics, relevant background notes and draft press release prior to the visit in order to better prepare for the visit and to better utilize the press conference in promoting the work of the ACQWS and WSD. The Chairman thanked Members for their comments and requested WSD to take these into account when arranging the next visit.	WSD
8.4	Reclaimed water reuse project at Ngong Ping	
8.4.1	WSD briefed Members on the background and the latest development of the reclaimed water reuse project at Ngong Ping. He reported that the Ngong Ping Sewage Treatment Works (NPSTW) had already been commissioned in March 2006 and reclaimed water was now reused in the NPSTW for toilet flushing, controlled irrigation and filling the aqua fishing pond. He added that some Members had participated in the opening ceremony of the NPSTW on 18 March 2006. The Chairman suggested and WSD agreed to organise another visit for the ACQWS to the NPSTW after commissioning of the cable car project in North Lantau, when the throughput of the NPSTW would reach the peak.	WSD
8.4.2	In response to a Member's enquiry, WSD advised that the estimated running cost of the NPSTW, a tertiary sewage treatment works, was over \$1.0/m ³ on top of the cost of running a secondary sewage treatment works. The figure would be more certain some time after commissioning of the cable car. The Chairman suggested WSD to collect the running cost data of the treatment works and report the findings in the next meeting.	WSD
8.4.3	In reply to a question raised by a Member , WSD stated that the project was to explore alternative water resources for flushing and irrigation. Although at the moment, there was no intention to use the reclaimed water for drinking purpose, it could still save some fresh water. Taking into account the result of the pilot project and public acceptance, WSD would review the strategy in	WSD

the implementation of reclaimed water reuse projects in other areas in Hong Kong and the usage of the reclaimed water. [A Member](#) added that the Government had undertaken a Total Water Management Study in October 2005 and one of its objectives was to explore alternative water resources in Hong Kong to map out the way forward.

8.4.4 [A Member](#) questioned why tertiary treatment was required to produce flushing water. The Vice-Chairman clarified that the NPSTW was situated within water gathering ground and hence it was necessary to provide tertiary treatment to the sewage before disposal in order to comply with the Water Pollution Control Ordinance. The reclaimed water reuse project utilized part of the treated effluent for flushing purpose.

8.4.5 In response to an enquiry from [some Members](#), [Environment, Transport and Works Bureau \(ETWB\)](#) informed Members that a demonstration scheme would be implemented in Shek Wu Hui covering the reuse of reclaimed water for flushing and irrigation, and Environmental Protection Department was the project proponent.

8.4.6 [A Member](#) supplemented that reclaimed water reuse was not new to Hong Kong. Many years ago, the Hong Kong Jockey Club had used reclaimed water from the Sha Tin Sewage Treatment Plant for irrigation of the Sha Tin race course and the Penfold Park. However the sewage treatment plant effluent was not suitable for irrigation reuse following the implementation of seawater flushing in Sha Tin. The general public was also concerned about the health risk. The scheme was then abandoned. He added that the treatment technology had been advancing with time and adoption of reclaimed water as an alternative water resource in Hong Kong would be more feasible now.

8.4.7 [A Member](#) suggested and [WSD](#) agreed to do more public education on reclaimed water reuse in the course of the Total Water Management Study.

WSD

8.5 Desalination pilot plant study

8.5.1 [A Member](#) declared that he was working in ATAL Engineering Limited, which was the Contractor for the supply, installation and operation of the desalination pilot plant. However, he was not involved in the desalination pilot plant study at any stage. The Chairman and all other Members had no objection to let [the Member](#) join the discussion on this item.

Item	Action
8.5.2	<p>WSD briefed Members the background and latest development of the desalination pilot plant study. He reported that the study at Tuen Mun was completed in December 2005 and the pilot plant had been relocated to Ap Lei Chau to commence a further study in February 2006 under a different seawater environment.</p>
8.5.3	<p>The Chairman advised that the ACQWS had visited the plant at Tuen Mun last year and suggested WSD to arrange another visit to the plant at the new site at Ap Lei Chau.</p>
8.5.4	<p>A Member noticed that WSD chose membrane technology for desalination and questioned whether WSD had considered other technologies, such as flow through capacitor. WSD replied that WSD had considered various desalination technologies before. It was understood that the flow through capacitor was one of the developing and futuristic technologies, and not considered as a viable option. Hence, WSD had focused on membrane technology at this stage. The Vice-Chairman admitted that there were various feasible technologies to produce potable water. However, cost effectiveness was an important factor in determining alternative water resources. In fact, the production cost of desalination by membrane technology was at present higher than the costs for purchasing and treating Dongjiang water. Notwithstanding this, WSD would monitor the cost trend of the various treatment technologies to review the strategies in alternative water resources.</p>
8.6	<p>Working Group on Public Education</p> <p>Since <u>Ms. CHEUNG Lai Ping, Lister</u>, the Chairlady of the Working Group on Public Education, had retired from the ACQWS, the Chairman invited volunteers or nominations for the chairmanship of the working group. A Member nominated <u>Ms. LEE Yoke Shum, Sam</u> to be the Chairlady of the working group. All Members supported and <u>Ms. LEE</u> accepted the nomination to chair the working group.</p>
8.7	<p>Agenda Item 3 : Water Safety Plan (ACQWS Paper No. 17)</p>
8.7.1	<p>WSD briefly introduced the proposals to adopt and monitor all water quality parameters and to implement the Water Safety Plan (WSP) developed by WSD in accordance with the new Guidelines for Drinking-water Quality, Third Edition published by the WHO on 21 September 2004.</p>
8.7.2	<p>A Member asked if a contingency plan to cope with pollution</p>

incidents in Dongjiang, similar to the case with Songhua Jiang in November 2005, would be prepared and incorporated in the WSP. WSD clarified that there had already been a well-established contingency plan for Dongjiang water supply. Firstly, an emergency notification mechanism on any incidents that might affect the quality and safety of Dongjiang water had already been established between WSD and the relevant parties on the Guangdong side. Secondly, it would take about 1 week to convey Dongjiang water from its abstraction point at Taiyuan Pumping Station through the dedicated aqueduct system and the Shenzhen Reservoir to the reception point at Muk Wu Pumping Station in Hong Kong. There would be ample time to react to any pollution incidents along Dongjiang. Thirdly, if situation warranted, WSD would reduce or suspend the supply of Dongjiang water to Hong Kong and switch the raw water source of water treatment works to local water sources. WSD now targeted to maintain the storage of reservoirs at about 70% full at any time. The Vice-Chairman added that this would enable us to maintain full supply for more than 3 months even without Dongjiang water supply.

- 8.7.3 In response to a Member's remark, WSD advised that there were 17 impounding reservoirs in Hong Kong and a contingency plan had been put in place to deal with contamination of any impounding reservoirs to avoid the abstraction of contaminated water to the water treatment works as far as practicable.
- 8.7.4 In reply to a question from a Member, WSD clarified that the Water Safety Plan for Dongjiang water, which formed part of the WSP, was submitted to the Guangdong side for agreement, in particular, on the notification mechanism and contingency measures stipulated therein.
- 8.7.5 In response to an enquiry from the Chairman, WSD advised that as agreed with the Department of Health, WSD would adopt the whole set of guideline values (i.e. 93 chemical parameters of health significance) in the new WHO 2004 guidelines. A Member asked about the frequency of the surveillance arrangement. WSD replied that it would be carried out continuously as an on-going exercise and weekly compliance reports on treated water quality would be submitted to the Department of Health. A Member also enquired whether WSD would test the 12 Persistent Organic Pesticides (POPs) in drinking water surveillance under the Stockholm Convention, WSD responded that WSD would arrange to monitor these POPs in drinking water.

Item	Action
8.7.6	<p>A Member enquired about on the additional resources required for the implementation of the WSP. WSD replied that WSD planned to implement the WSP in 2007 and this would call for additional posts for a Chemist, Engineering Laboratory Technicians and operational staff. The Vice-Chairman suggested that the resources issue could be dealt with by the Environment, Transport and Works Bureau (ETWB) and WSD separately outside the meeting.</p>
8.7.7	<p>The Chairman and all Members fully supported the implementation of the WSP and the seeking of resources in order to secure a safe and reliable water supply in Hong Kong.</p>
9.	Any Other Business
9.1.	<p>WSD reported that the Government had concluded negotiations with the Guangdong Provincial Government on the new supply arrangements for Dongjiang water on 12 April 2006. The new arrangement would guarantee a fully flexible supply of Dongjiang water up to 2008 based on the actual needs of Hong Kong. He emphasised that under the new agreement, the Guangdong side would continue to protect the water environment in the vicinity of Dongjiang and strive to upgrade the Dongjiang water quality with a view to complying with the latest national standard. We would benefit from reduced expenses in water treatment due to enhanced quality of Dongjiang water.</p>
9.2	<p>A Member stated that the emphasis of “Water Safety” and “Water Security” was somewhat different: the concern of the former was water quality while that of the latter was mainly water availability. In fact, the WSP basically aimed to protect the quality of drinking water and therefore “供水安全計劃” was an appropriate Chinese translation of the plan.</p>
10.	<p>There being no other business, the meeting was adjourned at 5:00 p.m.</p>