

Advisory Committee on the Quality of Water Supplies Minutes of Meeting No. 9

Date: 11 July 2003 (Friday)
Time: 2:30 p.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
Dr. CHEUNG Yun Hing, Richard	City University of Hong Kong
Prof. HO Kin Chung	Open University of Hong Kong
Prof. LAM Kin Che	The Chinese University of Hong Kong
Mr. WONG Kwok Keung	Hong Kong Plumbing and Sanitary Ware Trade Association
Mr. CHEUNG Yan Hong	Wong Tai Sin District Council
Ms. CHOW Kit Bing, Jennifer	Eastern District Council
Ms. CHUI Pui Man, Wendy	Islands District Council
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. TSO Wung Wai	The Chinese University of Hong Kong
Dr. CHIU Tak Lun, Michael	Assistant Director, Environmental Protection Department
Mr. CHAN Shiu On, James	Chief Assistant Secretary, Environment, Transport and Works Bureau
Ms. LO Yuet Yee, Rhonda	Assistant Director, Food and Environmental Hygiene Department
Dr. TSE Lai Yin	Consultant, Department of Health
Mr. WONG Bay	Assistant Director, Housing Department
Mr. LAU Chi Ming, Stephen	Secretary, Senior Engineer, Water Supplies Department

Members Absent with Apologies

Mr. WU Sai Him, Hugh	The Hong Kong Institution of Engineers
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In Attendance

Mr. CHAN Pui Wah	Deputy Director, Water Supplies Department
Mr. KU Chi Chung, Damien	Assistant Director, Water Supplies Department
Ms. HO Suet Mei, Daisy	Senior Chemist, Water Supplies Department

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1. The Chairman welcomed Members for attending Meeting No. 9 of the Advisory Committee on the Quality of Water Supplies (ACQWS) and in particular, Mr. CHAN Shiu On, James who stood in for the regular representative of the Environment, Transport and Works Bureau (ETWB), Mr. WAI Chi Sing due to the latter's commitment at another meeting. He then extended his welcome to the representatives from the Water Supplies Department (WSD).

2. The Chairman advised that unlike previous meetings, no media briefing would be held at the conclusion of the meeting as there would be a briefing for the media on 30 July 2003 after the presentation ceremony for the Fresh Water Plumbing Quality Maintenance Recognition Scheme certificate presentation.

3. **Agenda Item 1 : Confirmation of Minutes of the Last Meeting**

The minutes were confirmed with the following amendment:-

Page 4, Item 5.1.3, Line 14 – Delete the apostrophe after “Members”

4. **Agenda Item 2 : Matters Arising**

4.1 **Quality of water in buildings**

Fresh Water Plumbing Quality Maintenance Recognition Scheme

4.1.1 The Chairman advised that one positive effect of the atypical pneumonia outbreak was that the general public were more aware of personal and environmental hygiene and cleanliness. Perhaps because of this, the number of buildings awarded the recognition certificates had been increasing and reached 475 up to the end of June 2003. To give recognition to those who had successfully joined the scheme and to encourage more buildings to join, WSD had arranged the second presentation ceremony to be held on 30 July 2003. The Chairman encouraged Members to attend the forthcoming ceremony. The tentative programme rundown of the ceremony had already been distributed to all Members by e-mail the day before. The Vice-Chairman added that the ceremony would be held at the Peninsula Hotel, which was one of the three

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hotels awarded a certificate so far, and the Chairman would present the certificates on that day. Members expressed their support to the ceremony and were invited to forward their comments on the rundown to the Secretary after the meeting.

All
Members

4.2 Publication of Water Quality Data

4.2.1 The Chairman informed that as an annual exercise, the Guangdong Environmental Protection Bureau provided WSD with the water quality data of Dongjiang main stream for the year 2002. The data were published in WSD's Homepage on 28 May 2003.

4.2.2 The Chairman advised that following the decision of the last meeting, the Working Group on Publication of Water Quality Data held its first meeting on 10 June 2003 to discuss the new water quality data for the period from April 2002 to March 2003. Prof. HO Kin Chung chaired the meeting with the participation of Dr. CHEUNG Yun Hing, Richard and Prof. TSO Wung Wai, together with the relevant WSD staff. An advance copy of the water quality data had been distributed to all Members for information prior to publication in WSD's Homepage on 20 June 2003.

4.2.3 Prof. HO Kin Chung thanked those who attended the working group meeting and with their participation, the discussion had come up with good results. WSD had provided tables and supporting information to help them understand the water quality data better and they had improved the presentation by adding a note on Dongjiang water quality. He noted that the respective media reports were positive. He expected that the effect of the recently completed entire Dong-shen closed aqueduct system would be reflected in the next publication. He also informed that alternative ways of presenting the water quality data were proposed in the meeting and WSD undertook to review the proposals.

WSD

4.2.4 **WSD** supplemented that the new set of water quality data for drinking water complied chemically and bacteriologically with the World Health Organization (WHO) Guidelines for Drinking-water Quality. Regarding the set of quality data for Dongjiang water received in Hong Kong, **WSD** reported that with the commissioning of the phase 1 of the Dong-shen closed aqueduct system on 18.1.2003, a comparison was made on the results for the period from February to May this year with those of the same period last year. There were improvements in levels of

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ammoniacal nitrogen, biological oxygen demand and dissolved oxygen. WSD told Members that as the entire Dong-shen closed aqueduct system had just been used for a very short period of time, the full effect of the closed aqueduct system on water quality would be progressively reflected in the half-yearly updates of water quality data near end 2003, mid 2004 and end 2004.

4.2.5 The Vice-Chairman thanked Prof. HO Kin Chung for leading the working group and informed that a new system, i.e. the Laboratory Information Management System, to manage water quality data would become operational by mid 2004 and might help to reduce the processing time for publication of the water quality data.

4.2.6 WSD informed that the Guangdong side had greatly improved the transparency of their water quality data along Dongjiang. He noted that apart from releasing the water quality data sampled near Taiyuan Pumping Station for publication in the WSD Homepage, simplified data along different parts of Dongjiang mainstream were also published in Guangdong's Homepage for the information of the general public.

4.3 **Publicity in the International Fresh Water Year**

4.3.1 The Chairman advised that following the decision of the last meeting, the Working Group for Publicity in the International Fresh Water Year held its first meeting on 15 May 2003 to discuss the publicity plan. Ms. CHEUNG Lai Ping, Lister chaired the meeting with the participation of Dr. CHEUNG Yun Hing, Richard and Mr. WONG Bay, together with the relevant WSD staff. He then asked Ms. CHEUNG to introduce the publicity plan proposed by the Working Group.

4.3.2 WSD distributed in the meeting the proposed publicity plan to Members for reference. Ms. CHEUNG Lai Ping, Lister explained that the objective of the plan was to raise the awareness of the general public, particularly the youth, of the importance of conservation of world water resources. She highlighted that the working group proposed to organize a series of seminars, workshops and forums. The major target participants were secondary school students and tertiary institute students. Outstanding students in the workshops and forums would be selected to participate in a study trip to overseas countries to study how these countries managed and conserved their water. She reminded that considerable resources would be needed for the

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implementation of the plan.

- 4.3.3 The Chairman suggested that a popular topic for debate might be “Is the apparent oversupply of Dongjiang water a waste or an insurance”. He considered that the public should have a better understanding of the issue. The Vice-Chairman agreed and took the opportunity to explain again that Hong Kong as a world city could not afford to suffer from water rationing and hence would need to secure the supply of sufficient quantities of water with safety margin to insure against that risk.
- 4.3.4 **A Member** suggested that summer vacation programmes with parents’ participation on environmental education could be arranged and newspaper companies might be invited to take part as co-organizers or sponsors. Ms. CHEUNG Lai Ping, Lister responded that the time might be too tight for organizing summer vacation programmes. She opined that to achieve meaningful results, preparation would be essential. Time and resources would be required for WSD and organizations concerned to prepare the necessary information and to publicize them. She would prefer to focus on the education of secondary school students. She hoped that through the workshops and forums, students would be trained on critical thinking skills and such training would broaden their horizon in the process of analysing a wide variety of global and local issues related to water conservation.
- 4.3.5 The Vice-Chairman explained that putting aside the tight budget and staff resources because of government spending cuts, it was still difficult for WSD, as a government department to finance the events directly. It would be more desirable if the events were arranged by a non-government organization. Even as a non-paying partner, WSD would assist in seeking sponsors and provide technical supports.
- 4.3.6 After some discussions, Members reached a consensus that the events should be organized by a non-government organization and the Advisory Committee and WSD should participate as one of the co-organizers/sponsors. Dr. CHEUNG Yun Hing, Richard advised that the Chartered Institution of Water and Environmental Management in Hong Kong would hold an event in Hong Kong around October/November this year, which would focus on Water and Environmental Management in Hong Kong. The event would be opened to students of Form 5 and above. As he was the event organizer, he could help to seek the Institution’s consent to co-organize the event with the Advisory Committee and WSD. **Dr. CHEUNG**

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Members welcomed and supported Dr. CHEUNG's proposal.

5. **Agenda Item 3 : Full commissioning of the Dong-shen Water Supply Improvement Works**

5.1 The Chairman reported that Members were informed in advance by e-mail on 19 June 2003 that the entire closed aqueduct system of the Dong-shen Water Supply Improvement Works would be commissioned on 28 June 2003. He understood that high level Hong Kong Special Administrative Region (HKSAR) Government officials attended the opening ceremony on that day at Tangxia, Donguan.

5.2 **WSD** informed Members that high level officials from both the Guangdong Provincial Government and the HKSAR Government attended the opening ceremony. **WSD** advised that the event was well reported by the media and the government news bulletin board, and Members might visit the government news bulletin board for further information. **WSD** added that to facilitate the commissioning of the entire closed aqueduct system, the shutdown period of Dongjiang water supply in 2003 was advanced from December to June.

6. **Agenda Item 4 : Visit to Guangdong**

6.1 The Chairman recalled that the Advisory Committee had earlier planned to have another visit to the closed aqueduct system after its full commissioning. He advised that **WSD** proposed to arrange a visit in October 2003 and the proposed itinerary for the visit was distributed to all Members for reference and comments by e-mail on 10 July 2003.

6.2 **WSD** advised that the visit would cover the major spots along the closed aqueduct system as proposed. In view of the long travelling time required, he suggested and Members agreed that a 2 days visit would be preferred. Members were welcomed to forward their comments or views on the proposed visit to the Secretary after the meeting. All Members

7. **Agenda Item 5 : Situation report on reclaimed water reuse project at Ngong Ping**

7.1 **WSD** reported that the Drainage Services Department had already invited tenders for the construction of the sewage treatment plant in Ngong Ping, which was expected to be completed in mid 2005. A cross-department working group had been established to study

the possible uses of the effluent from the tertiary sewage treatment plant. Three proposed public toilets were identified to use the reclaimed water for flushing. The working group was also liaising with the Mass Transit Railway Company Limited (MTRCL) to explore possible uses such as flushing and irrigation in their cable car development in Ngong Ping. He would keep Members informed of further developments. The Vice-Chairman added that a fresh water back-up system would be provided to cater for demand fluctuation and contingency for emergency, and that MTRCL had already indicated that they would not use the reclaimed water for cleaning cable cars as the operation would be carried out in their Tung Chung depot.

- 7.2 In response to Members enquiries, **WSD** and **ETWB** advised that about 30-40% of the treated effluent would be used for flushing and irrigation, and the remaining treated effluent would be discharged to the sea via a treated effluent pipe and a submarine outfall. **ETWB** supplemented that “controlled” irrigation would be adopted in MTRCL’s cable car project in Ngong Ping and that it would not pose adverse effects on the quality of the groundwater since the treated effluent would be treated to very high quality. According to the Environmental Protection Department and Department of Health, the quality of reclaimed water would be comparable to the current standards used for seawater flushing and the methodology conformed with the “actual health risk” proposed by WHO.
- 7.3 **A Member** commented that the Hong Kong Government seemed conservative in using reclaimed water when compared with the Singapore Government. **WSD** responded that the system adopted by Singapore was designed to produce higher quality reclaimed water and was more expensive. The Chairman also pointed out that the Singapore Government had different considerations such as political concern.
- 7.4 **A Member** raised that to make the best use of our water resources, other possible uses of reclaimed water should be explored.
- 7.5 **A Member** expressed the view that WSD was too conservative in the use of reclaimed water for irrigation within water gathering ground. She opined that the reclaimed water after tertiary treatment and chlorination, should be good enough for irrigation. She suggested that as this would be a pioneer project in Hong Kong, a small scale pilot study should be carried out to monitor the quality of seepage from irrigation, to investigate the impact of such use within the water gathering ground and to review the

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impact on water pollution. The Vice-Chairman clarified that the working group had proposed the use of reclaimed water for irrigation at Ngong Ping located within water gathering ground. He assured that WSD would monitor and review the situation. WSD emphasised that WSD would take a cautious approach to proceed with the use of reclaimed water in water gathering grounds in order to avoid contaminating our scarce and precious local raw water resource.

- 7.6 A Member raised that WSD should clarify with the public that reclaimed water was good for irrigation but the concern was on the reclaimed water in the form of surface runoff polluting the water gathering ground. He believed that if reclaimed water seeped through the soil and then entered the water gathering ground, it would not cause any contamination because it had gone through natural purification.
- 7.7 In response to a Member's enquiry, WSD answered that the quality standard of the treated effluent from the proposed Ngong Ping Sewage Treatment Works did not comply with the discharge standards for Group A inland waters as specified in the Water Pollution Control Ordinance. WSD supplemented that that was why direct discharge of the treated effluent would not be allowed within water gathering ground in Ngong Ping. The Environmental Protection Department (EPD) informed that at present, there was pollution in Shek Pik catchment areas due to existing discharges in Ngong Ping areas. The proposed sewage treatment works project would help to solve the present pollution problem and cater for the proposed developments in these areas. A Member concurred with EPD that the pollution problem in Shek Pik catchment areas would be improved upon commissioning of the sewage treatment works project.
- 7.8 A Member suggested that if the project in Ngong Ping was successful, the working group should consider expanding the application of the reclaimed water for other uses or in other areas. WSD welcomed the Member's suggestion and advised that this would be considered in future review of the project. WSD WSD added that consideration might be given for extending the use of reclaimed water for flushing in the Northern New Territories where fresh water was used for flushing. WSD supplemented that 80% of the population was already supplied with seawater for flushing.
- 7.9 A Member pointed out that WSD should put more effort in the publicity to promote public acceptance to use reclaimed water in

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	order to raise the demand for reclaimed water. The Vice-Chairman advised that the working group chaired by WSD would also deal with the relevant publicity work.	WSD
7.10	A Member suggested that WSD should take a proactive role in the publicity work, education and release of information about the use of reclaimed water in Ngong Ping. This could avoid misleading reports from the media that might give incorrect messages to the general public. WSD advised that the MTRCL might consider displaying the supply system of reclaimed water in their proposed exhibition centre in Ngong Ping for promotion of the system.	WSD
7.11	After much discussion, Members all supported the use of reclaimed water for irrigation in MTRCL's cable car project as it would be treated to a very high standard. Members also urged for wider use of the reclaimed water and promotion of its use in other areas. The Vice-Chairman reiterated that he had always agreed that the reclaimed water could be used for irrigation in addition to flushing in MTRCL's cable car project at Ngong Ping and he believed that there should not be any significant adverse effect to the water gathering ground.	
7.12	WSD thanked Members for their valuable comments and expressed that WSD would consider their views in formulating future strategies. He would report to Members in future on new development of the project in Ngong Ping.	WSD
8.	Agenda Item 6 : Situation report on desalination pilot plant study	
8.1	WSD reported that a consultant had already been engaged in May 2003 to carry out the pilot study on desalination. Two pilot plants each with a capacity of 200 m ³ /d would be installed in early 2004 in Tuen Mun Salt Water Pumping Station and Ap Lei Chau Salt Water Pumping Station. It was expected that a study report would be completed in end 2004. By then, the pilot plants would continue to be operated to obtain supplementary information. The whole study would be completed in 2006. Members would be kept informed of the development of the study.	
9.	Agenda Item 7 : Situation report on possible use of reservoirs for recreation	
9.1	The Chairman said that some Members might recall that in Meeting No. 5, the possible use of reservoirs for recreation was	

discussed with representatives from the Planning Department (Plan D). It was agreed that if the Second Stage Public Consultation of the HK2030 Study by Plan D reflected that public opinion supported the proposal for recreational use of reservoirs, a pilot scheme would be proceeded to assess the impact on water quality. He asked WSD to report on the latest situation of the issue.

9.2 **WSD** reported that the recent SARS outbreak induced more people to go to the country parks and go fishing in the reservoirs. In response to this, WSD had extended the fishing period this year as an one-off measure. In fact, the Government had established a working group to study the opening up of reservoirs for recreational and other uses. At present, the working group was investigating into the opening up of Pok Fu Lam Reservoir after the Second Stage Public Consultation of the HK2030 Study. Environmental friendly recreational activities, such as boating with solar energy pleasure craft, were being considered. Another Consultancy Study on the Development of Tourism in Northern New Territories was also ongoing and was considering opening up of Plover Cove Reservoir. WSD had pointed out that any proposal to open up reservoirs should be submitted to the ACQWS for consideration.

9.3 **A Member** reminded that making reference to the failure in Wong Nai Chung Reservoir case, economic viability and good management were of paramount importance to a sustainable development in the reservoir. **WSD** assured that environmental protection and economic viability would be addressed in the investigation for opening up the Pok Fu Lam Reservoir.

10. **Agenda Item 8 : Misleading advertisements for water purifiers**

10.1 The Chairman advised that recently, there were some misleading advertisements for water purifiers and asked WSD to report on the situation so that Members could discussed on the strategy to respond to these advertisements.

10.2 **WSD** advised that two samples of misleading advertisements were distributed to Members for reference prior to the meeting by e-mail. She noted that the advertisements carried incorrect messages on the quality of tap water in Hong Kong. The Vice-Chairman added that WSD had already invited the Consumer Council to carry out a joint study. **Department of Health (DH)** pointed out that the current legislation only regulated western

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- medicines or food, which was harmful to health and did not seem to cover water. **DH** would check whether the advertisement on pi-water contravened the Undesirable Medical Advertisement Ordinance. After some discussions, Members generally agreed that WSD should focus on clarifying misleading information concerning tap water whereas the correctness of product information should be monitored by the Consumer Council. **DH**
- 10.3 Prof. TSO Wung Wai suggested WSD to consider conducting similar experiments as indicated in the misleading advertisements as it was important to assure that the quality of tap water was good. He pointed out that WSD should not attempt to offer an explanation of the cause of the putative 'dirt'. **WSD** reiterated that the drinking water quality supplied to consumers conformed to the WHO standards and the levels of heavy metals (e.g. mercury) and pesticides were well below the WHO limits and safe for consumption. Only a trace amount of minerals was present in drinking water and the trace amount of minerals was suitable for consumption. The Chairman indicated the need to Prof. TSO bring out the correct message on water quality and requested **& WSD** WSD to follow up in collaboration with Prof. TSO.
- 10.4 **A Member** pointed out that the purifier suppliers were making use of the public's distrust of the quality of tap water. As such, the strategy should focus on publicity emphasising the importance of plumbing maintenance and the forthcoming presentation ceremony would provide a good opportunity to do so. She suggested that WSD should consider producing a video showing how the certificate holders maintained their plumbing systems for publicity and education purposes. **WSD**
- 10.5 In response to **a Member's** enquiry, the Vice-Chairman clarified that WSD did not encourage the installation of water purifier to water tap because this might contaminate the water supply in case of backflow. Also, if the water purifier was not maintained properly, it would contaminate the water, which might be harmful to the customers. **The Member** suggested WSD to have more publicity in this connection. **WSD**
11. There being no other business, the meeting was adjourned at 5:10 p.m.