

**Advisory Committee on the Quality of Water Supplies**  
**Minutes of Meeting No. 23**

**Date:** 1 February 2012 (Wednesday)

**Time:** 2:30 p.m.

**Venue:** Conference Room, Water Supplies Department, 48/F, Immigration Tower,  
7 Gloucester Road, Wan Chai, Hong Kong

**Present**

Prof. HO Kin Chung	Chairman The Open University of Hong Kong
Mr. MA Lee Tak	Vice-Chairman Director of Water Supplies
Mr. CHAN Sheung Yan, Kenneth	Chun Lee Engineering Co. Ltd.
Ms. HO Siu Fong, Betty	Plan Arch Consultants Ltd.
Dr. WONG Chun Yu, Benjamin	The University of Hong Kong
Ms. WONG Wai Lan, Luciana	LNS Ltd.
Mr. POON Lock Kee, Rocky	NWS Engineering Group Ltd.
Mr. WONG Siu Wai, Kenny	Hong Kong Productivity Council
Dr. SHIN Kam Shing, Paul	The City University of Hong Kong
Dr. CHEUNG Yun Hing, Richard	City University of Hong Kong
Prof. CHAU Kwai Cheong	The Chinese University of Hong Kong
Ms. SO Yee Ching, Phyllis	Wong & Fok Solicitors
Ms. FONG Kwok Shan, Christine	Sai Kung District Council
Mr. CHAN Pai Ming, Jimmy	Principal Assistant Secretary Development Bureau
Mr. TANG Kin Fai	Assistant Director Environmental Protection Department
Mr. LAM Kam Kong	Senior Superintendent Food and Environmental Hygiene Department
Dr. LEUNG Ting Hung	Consultant Department of Health
Mr. LI Kan Kay	Secretary Senior Engineer, Water Supplies Department

**Water Supplies Department Representatives in Attendance**

Mr. CHAN Kwong Wei	Deputy Director, Water Supplies Department
Mr. NG Mang Tung, Bobby	Assistant Director, Water Supplies Department
Mr. CHAN Kin Man	Chief Chemist, Water Supplies Department
Mr. LAM Ching Man	Chief Engineer, Water Supplies Department
Mr. CHAN Shu Key, Charles	Senior Engineer, Water Supplies Department
Mr. PANG Kwok Fan	Senior Engineer, Water Supplies Department
Mr. WONG Yee Shing	Engineer, Water Supplies Department (Notes Taker)

## **Absent with Apologies**

Ms. WONG Pik Yan, Nicole	World Wide Fund for Nature Hong Kong
Prof. YU Chai Mei, Jimmy	The Chinese University of Hong Kong
Ms. LEE Kwun Yee, Kenny	Wan Chai District Council
Mr. CHAN Man Kin	Kwun Tong District Council
Ms. CHU Lan Ying	Assistant Director
	Food and Environmental Hygiene Department
Mr. CHAN Siu Tack	Assistant Director
	Housing Department

### **Item**

### **Action**

## **Opening Remarks**

- 1.1 The Chairman welcomed all members and representatives of Water Supplies Department (WSD) to the 23<sup>rd</sup> Meeting.
- 1.2 The Chairman informed the meeting that Ms. WONG Pik Yan, Nicole; Prof. YU Chai Mei, Jimmy; Ms. LEE Kwun Yee, Kenny; Mr. CHAN Man Kin; Ms. CHU Lan Ying and Mr. CHAN Siu Tack had sent in their apology for not being able to attend the meeting and that Mr. LAM Kam Kong was attending the meeting on behalf of Ms. CHU Lan Ying as representative of the Food and Environmental Hygiene Department. Mr. CHAN Shu Key, Charles had replaced Mr. LAU Kan Kwok as the Senior Engineer/Customer Services (Technical Support) of WSD. The Chairman welcomed Mr. LAM and Mr. CHAN for attending the meeting.

## **Agenda Items**

### **Confirmation of the Minutes of the 22<sup>nd</sup> Meeting held on 22 July 2011**

- 2.1 The Secretary reported that the draft minutes of the 22<sup>nd</sup> Meeting had been circulated to members for comment and no comment was received before the Meeting. There being no further amendment proposed at the Meeting, the Chairman announced that the latest draft minutes of the 22<sup>nd</sup> Meeting were confirmed.

## **Matters Arising**

- 3 **Quality of Water in Buildings - Quality Water Recognition Scheme for Buildings (QWRSB)**
- 3.1 The Chairman invited Mr. Chan Shu Key, Charles of WSD to brief members on the progress of the follow-up action based on the findings of the opinion survey on Quality of Water in Buildings.

**3.2** Mr. CHAN said that the Working Group (WG) on Quality of Water in Buildings had met on 18 July 2011 to discuss on follow-up actions after the completion of the opinion survey. A summary of the WG's observations and the present position of follow-up actions was presented as follows:

- (a) The WG observed that there had been continuous increase in the no. of buildings joining the Scheme. This reflected that the popularity of the Scheme was growing and the procedural requirements were generally accepted by the public. All in all, this Scheme was considered to be a successful one but it would be regularly reviewed for enhancement.
- (b) No change to the current application procedures was considered required for the time being as the procedures were relatively simple and straightforward.
- (c) Further review was considered required on whether increasing the frequencies of sampling and testing would be viable, noting that more frequent sampling and testing might provide disincentive for new applicants joining the scheme and for existing participants who might drop out from the scheme on operational or financial grounds.
- (d) In response to a suggestion of a WG member to consider publicising the Scheme further by advertisement panels at the roof of the low block of the WSD Mongkok Office, Mr. CHAN said that a banner on the Scheme and another on WELS/TWM were currently being displayed at the location. In view of the concern on light pollution and the additional energy consumption, the idea to install a LED display panel at the location had been considered but ruled out in 2008.
- (e) The pros and cons of whether to include the water quality aspect as one of the assessment criteria in launching competitions for water conservation in the future were also discussed. The WG decided to keep the item in view.
- (f) A study would be conducted to explore ways for recognition of organizations/parties demonstrating an 'Outstanding performance' in the QWRSB.

**3.3** Mr. CHAN Shu Key, Charles stated that the QWRSB had been launched for ten years covering more than 1 million households. The Working Group was exploring the feasibility to extend the Scheme to cover salt water flushing systems. Mr. CHAN Sheung Yan, Kenneth said that the WG was glad to note that more Government buildings and Public Housing Estates were encouraged to join the QWRSB.

**3.4** The Chairman expressed his appreciation of the efforts that WSD & the WG had made in promoting and implementing the Scheme.

## **4 Publication of Water Quality Data**

**4.1** The Chairman invited Mr. CHAN Kin Man of WSD to report the progress on the publication of water quality data of Dongjiang water received in Hong Kong at Muk Wu Pumping Station and of the drinking water in Hong Kong. Mr. CHAN reported that the Working Group on Publication of Water Quality Data had met on 27 October 2011 and endorsed the water quality data for the period from 1 October 2010 to 31 September 2011. The aforementioned water quality data had subsequently been uploaded to WSD's website on 3 November 2011.

**4.2** Mr. CHAN also reported that the quality of both Dongjiang water and the drinking water in Hong Kong complied respectively with the national standard set out for Type II waters in the "Environmental Quality Standards for Surface Water, GB3838-2002" and the World Health Organization's "Guidelines for Drinking-water Quality, 2008"(WHO 2008).

**4.3** Mr. CHAN informed the meeting that the publication of the updated water quality data from 1 April 2011 to 31 March 2012 was scheduled for May/June 2012 after endorsement by the Working Group.

**WSD**

**4.4** Mr. CHAN Kin Man briefed the meeting that WHO had launched the fourth edition of the Guidelines for the Drinking-water Quality (WHO 2011) on 4 July 2011. Compared with WHO2008, 6 chemical parameters viz. Cyanide, Cyanogen Chloride, Manganese, Molybdenum, Permethrin and Pyriproxyfen, were deleted, whilst 4 new chemicals were added, viz. Deethyl-atrazine (DEA), Deisopropyl-atrazine (DIA), Diaminochlorotriazine (DACT) and Hydroxyatrazine, which were metabolites of a herbicide known as Atrazine. Mr. CHAN stated that WSD had been making effort to identify and develop suitable testing methods to enable water quality monitoring in compliance with the WHO 2011 by August 2012.

**WSD**

**4.5** Mr. CHAN Kin Man presented a paper on the publication of radiological quality data in the meeting. Mr. CHAN briefed that radiological monitoring of the water supply had been a regular component of the water quality monitoring programme of the WSD. The Fukushima nuclear incident in March 2011 had aroused considerable public interest in the radiological quality of drinking water in Hong Kong. In order to keep the public better informed of the radiological quality of the drinking water supply in Hong Kong, it had been proposed by the Working Group on Publication of Water Quality to publish the radiological monitoring data on drinking water alongside with other water quality data currently available at the WSD website.

**4.6** Dr. SHIN Kam Shing, Paul questioned how to determine the number of water samples to be taken for testing. Mr. CHAN Kin Man replied that there was no sampling standard specified in WHO guideline. Generally speaking, the sampling strategy of WSD was risk-based and every year about 150 water samples were taken at water treatment works, distribution networks and

consumer taps for both gross alpha and gross beta activity measurements. Mr. CHAN added that WSD was also closely monitoring continuously the Dongjiang water quality through the On-line Water Contamination Monitoring System at Muk Wu Pumping Station and would step-up sampling whenever necessary.

**4.7** Mr. WONG Siu Wai, Kenny suggested adding some footnotes to explain the difference in the reporting limits of gross alpha and gross beta activity in the table for publication. Mr. CHAN Kin Man agreed to include the necessary information in the table for ease of reference. **WSD**

**4.8** After some discussion, the meeting agreed to publish the radiological quality data of drinking water on gross alpha and gross beta activities in Part C of the “Drinking Water Quality” under “Water Quality Monitoring Data” on the WSD website. The publication date, as suggested by Prof. CHAU Kwai Cheong and agreed by members, should be synchronized with the monitoring of the quality of drinking water supply in accordance with the WHO 2011. **WSD**

## **5 Visit to Guangdong**

**5.1** The Chairman invited Mr. NG Mang Tung, Bobby to report the progress of the visit to Dongjiang.

**5.2** Mr. NG stated that a delegation of the ACQWS comprising 9 members and 5 HKSAR Government officials led by the Chairman and the Director of Water Supplies paid a 2-day visit to the Dongjiang catchment area on 9 and 10 November 2011. The delegation visited the major reservoir in the upstream of Dongjiang namely Xinfengjiang Reservoir (新豐江水庫), He Yuan City South Sewage Treatment Plant (河源市市區城南污水處理廠), Taiyuan Pumping Station (太園抽水站) and the Shenzhen Reservoir (深圳水庫). A press conference was held upon members’ return to Hong Kong in the afternoon of 10 November 2011. The Chairman and four members, namely, Dr. CHEUNG Yun Hing, Richard, Ms. FONG Kwok Shan, Christine, Ms. SO Yee Ching and Ms. WONG Wai Lan, Luciana gave a briefing on their observations on the water quality of Dongjiang during the 2-day visit. The delegation advised that the water quality of Dongjiang was satisfactory and appealed to the Hong Kong public to conserve water. Mr. NG mentioned that a similar visit to Dongjiang would be arranged in October/ November in 2012.

**5.3** Mr. CHAN Sheung Yan, Kenneth said that there had been a press report quoting the Shenzhen Reservoir was polluted and asked for the details. Mr. NG Mang Tung, Bobby reported that WSD had requested Guangdong to report on the incident and rectify the situation as soon as possible. Mr. NG emphasized that Dongjiang water was supplied to Hong Kong through a dedicated aqueduct system and the quality of both Dongjiang water and the drinking water in Hong Kong complied respectively with the national standard and the WHO’s guidelines for Drinking Water Quality. Mr. NG **WSD**

ensured that the Guangdong side would continue to focus their efforts on the protection of Dongjiang at its sources, mainstream and tributaries.

## **6 Use of Reclaimed Water**

**6.1** The Chairman invited Mr. NG Mang Tung, Bobby to brief members on the progress relating to the use of reclaimed water. Mr. NG reported that:

- (a) The Technical Sub-Group (TSG) would continue to co-ordinate inter-departmental efforts in studying the use of reclaimed water.
- (b) CEDD's consultant was preparing an economical assessment comparing the supply of reclaimed water to New Development Areas in northeast New Territories for non-potable uses including toilet flushing with other supply options such as fresh water supply or salt water supply.
- (c) CEDD's consultant also proposed to reuse treated sewage effluent for non-potable uses in Lok Ma Chau Loop.

**WSD**

**6.2** Prof. CHAU Kwai Cheong asked for the reason of using treated sewage effluent for flushing in north-eastern part of the New Territories. Mr. NG Mang Tung, Bobby explained that this area was currently using fresh water for flushing and hence a change to treated sewage effluent for flushing would save fresh water. Furthermore, the standard of sewage treatment in this area was very stringent in order not to increase the pollution level.

**6.3** Ms. FONG Kwok Shan, Christine enquired about the cost effectiveness of reclaimed water supply. Mr. MA Lee Tak replied that as part of the investigations of use of reclaimed water, cost-effective technologies would be identified and unit production cost derived for comparison with that for other water resources. Mr MA added that a Technical Sub-Group (TSG) with members from DSD, EPD and WSD was set up to oversee the pilot schemes of water reclamation in existing sewage treatment plant in Ngong Ping and new sewage treatment plant in Shek Wu Hui. Ms. HO Siu Fong, Betty commented that it was difficult to prepare an economic assessment comparing the use of reclaimed water with fresh water supply as the cost of water supply in Hong Kong was very low. Prof. CHAU Kwai Cheong agreed with Ms. HO's comment and added that environmental implication should be included as one of the factors for an economic assessment.

**6.4** Ms. FONG Kwok Shan, Christine asked whether the Kwu Tung development area was included in the new development plan. Mr. NG Mang Tung, Bobby said that CEDD was planning the use of reclaimed water for three new development areas namely, Kwu Tung North, Fanling North and Ping Che/Ta Kwu Ling New Development Areas in the north-eastern part of the New Territories adjacent to Sheung Shui and Fanling. Mr MA Lee Tak added that the ACQWS could invite CEDD to do a presentation on the development plan in a future meeting.

- 6.5 The Chairman concluded that the ACQWS supported the direction to explore the use of reclaimed water in new developments and to implement other Total Water Management measures in new developments as far as practicable.

## 7 Terms of Reference (TOR) of the Committee

- 7.1 The Chairman invited Mr. NG Mang Tung, Bobby to brief the meeting on the latest state of play relating to the proposed revision of the TOR. Mr. NG reported that the following new name and TOR of the Committee had been proposed to the Development Bureau (DEVB) for endorsement.

WSD

**Advisory Committee on Water Resources and Quality of Water Supplies**

To keep under review and to advise the Government of the Hong Kong Special Administrative Region through the Director of Water Supplies on matters relating to water resources and quality of water supplies.

**水資源及供水水質事務諮詢委員會**

檢討水資源及供水水質事宜，並透過水務署署長給香港特別行政區政府提供意見。

- 7.2 The Chairman noted that subject to the endorsement by the Government, the new name and TOR would be adopted in the next term (i.e. 2012- 2014) of the Committee.

## 8 Water Conservation Campaign for Primary Schools

- 8.1 The Chairman invited Mr. PANG Kwok Fan to brief the meeting on the progress of the school water conservation campaign. Mr. PANG reported that:

WSD

- (a) In the school year 2011/12, 77 primary schools had invited us to conduct 86 roadshows. The number of invitation was estimated to be lower in the coming years since the programme has been running for three years and about half of the schools had already invited us to deliver talks to their students. Besides, with the new “School Water Audit” disc dispatched to all the primary schools last October, it was expected that some schools might prefer to make use of the audio-visual Powerpoint in the disc to convey the water conservation messages to their students.
- (b) The “Water Conservation Ambassador Selection Scheme” had become a recurrent programme item. The Scheme for 2010/11 was rolled out in December 2010, with about 3,490 students from 49 schools expressing interest in joining. A certificate presentation ceremony was held on 12 July 2011 to award certificates to 576 water conservation ambassadors in recognition of their participation and contribution in the Scheme. Over 1,000 Water Conservation Ambassadors were appointed in the last 2 rounds of the Selection Scheme and there were 29 schools showing interest in joining the Scheme this year.

- (c) A meeting with the Working Group on Public Education was held on 6 January 2012 to discuss the promotion plan in 2012.

**8.2** Mr. PANG stated that a teaching kit for liberal studies, “Water: Learn & Conserve” (知水、惜水) was dispatched to all secondary schools in November 2011. The content of the teaching kit was also available on the WSD website. He added that WSD would liaise with Education Department to organise briefing sessions on the teaching kit for teachers of secondary schools if necessary.

**9 The Hong Kong Voluntary Water Efficiency Labelling Scheme (WELS) on washing Machines and Water Taps**

**9.1** The Chairman invited Mr. NG Mang Tung, Bobby to brief the meeting on the progress about the implementation of WELS. Mr. NG reported that:

**WSD**

- (a) Registration of showers under WELS had commenced in September 2009. Up to end January 2012, 165 models had been registered.
- (b) Registration of water taps under WELS had commenced in September 2010. Up to end January 2012, 90 models had been registered.
- (c) Registration of washing machines under WELS had commenced in March 2011. Up to end January 2012, 39 models had been registered.
- (d) Consultation on the draft scheme document for WELS on urinals was in progress. It was expected that registration would commence by March/April 2012.

**9.2** Mr. CHAN Sheung Yan, Kenneth asked for the time frame for changing the scheme from “voluntary” to “mandatory”. Mr. NG Mang Tung, Bobby said that as WELS was a new initiative, it would take time for the suppliers and the consumers to adapt to the scheme. As such, the program was implemented on a "voluntary" approach in the first instance. Nevertheless, WSD would conduct a review at a suitable time.

**9.3** Ms. WONG Wai Lan, Luciana asked whether dishwashers would be included in the scheme. Mr. NG Mang Tung, Bobby explained that the use of dishwashers was not so popular in Hong Kong and so the introduction of WELS for dishwashers would be considered in a later stage.

**9.4** Mr. NG Mang Tung, Bobby said that WSD had launched a programme for retrofitting Government buildings and schools with water saving devices since 2009. Based on the available information, there was around 20% saving of water consumption in retrofitted buildings on average.



## **Any Other Business**

- 10.1** Mr. LAM Ching Man briefed Members regarding a case of Legionnaires' Disease (LD) involving a 67-year-old man at the Tamar Central Government Offices and Legislative Council Complex. Mr. LAM advised that the Prevention of Legionnaires' Disease Committee (PLDC) would meet on 8 February 2012 and would make recommendations on issues arising from the investigation of the recent detection of LD at Tamar. Professor YUEN Kwok Yung of the Department of Microbiology at the University of Hong Kong was invited to provide professional advice. Mr. LAM added that PLDC was set up in 1985 to advise the Government from the public health, microbiology and engineering services perspectives on the minimisation of the risk of LD, and the promotion of good practices to building owners and associated practitioners to prevent the outbreak of LD. International guidelines (including the guidelines of the World Health Organization (WHO) and the United Kingdom's Health and Safety Executive) and experts' opinions and advice would be brought up for discussion in the meeting.
- 10.2** Mr. CHAN Sheung Yan, Kenneth asked if it would be necessary to carry out testing of Legionella bacteria in the water supply systems within buildings. Mr. LAM Ching Man responded that according to the international guidelines, regular testing for Legionella bacteria in cold/hot water systems in buildings in the community was generally not required. Testing for Legionella bacteria should only be conducted for investigation upon notification of a human case of LD in the buildings concerned. Mr. MA Lee Tak emphasized that overseas best practice had been adopted, and that WSD would follow the recommendations made by the PLDC. WSD would keep members informed of the development.
- 11** There being no further items raised, the Chairman thanked Members for attending the meeting and adjourned the meeting at 4:45 pm.