

Advisory Committee on the Quality of Water Supplies
Minutes of Meeting No. 21

Date: 16 February 2011 (Wednesday)

Time: 2:00 p.m.

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

Present

Prof. HO Kin Chung	Chairman
Mr. MA Lee Tak	The Open University of Hong Kong
	Vice-Chairman
	Director of Water Supplies
Ms. WONG Pik Yan, Nicole	World Wide Fund for Nature Hong Kong
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
Prof. YU Chai Mei, Jimmy	The Chinese University of Hong Kong
Ms. WONG Wai Lan, Luciana	LNS Ltd.
Mr. POON Lock Kee, Rocky	NWS Engineering Group Ltd.
Dr. SHIN Kam Shing, Paul	The City University of Hong Kong
Mr. WONG Siu Wai, Kenny	Hong Kong Productivity Council
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
Mr. CHAN Man Kin	Kung Tong District Council
Ms. LEE Kwun Yee, Kenny	Wan Chai District Council
Ms. FONG Kwok Shan, Christine	Sai Kung District Council
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 Man Pang	Chief Engineer, Water Supplies Department
Mr. LAU Kan Kwok	Senior Engineer, Water Supplies Department
Mr. PANG Kwok Fan	Senior Engineer, Water Supplies Department
Mr. YAU Hau Yin	Engineer, Water Supplies Department
Mr. WONG Yee Shing	Engineer, Water Supplies Department (Notes Taker)

Absent with Apologies

Mr. CHUI Wing Wah	Principal Assistant Secretary Development Bureau
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 to the 21st Meeting.
- 1.2 The Chairman informed the meeting that Mr. CHUI Wing Wah, 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. PANG Kwok Fan had replaced Mr. SUEN Kwok Keung as the Senior Engineer/Public Relations of WSD. The Chairman welcomed Mr. LAM and Mr. PANG for attending the meeting.

Agenda Items

Confirmation of the Minutes of the 20th Meeting held on 20 May 2010

- 2.1 The Secretary reported that the draft minutes of the 20th Meeting had been circulated to members for comment and that initial comments had been received and incorporated in the revised draft minutes distributed before the Meeting. There being no further amendment proposed at the Meeting, the Chairman announced the minutes of the 20th Meeting were confirmed.

Matters Arising

- 3 **Quality of Water in Buildings - Quality Water Recognition Scheme for Buildings (QWRSB)**
 - 3.1 The Chairman invited Mr. LAU Kan Kwok of WSD to brief members on the progress of QWRSB review.
 - 3.2 Mr. LAU reported that two meetings of the Working Group on Quality of Water in Buildings were held in July 2010 and January 2011 and the progress of the QWRSB review was highlighted below:
 - (a) Collection of data on the age of buildings of the existing participants was completed by end December 2010. Analysis of the data indicated

that 92% of the buildings concerned was below 35 years and the building age distribution was quite even. Data collected would be used for future review/analysis when necessary.

- (b) The Working Group had endorsed the questionnaires for an opinion survey on issues related to the QWRSB. WSD had awarded a tender to engage an independent consultant to conduct the opinion survey in October 2010 and the opinion survey was scheduled to be completed in May 2011.

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- (c) On the suggestion raised at the 20th Meeting of printing on the certificates the names of those which had contributed towards the successful registration under the QWRSB in recognition of their participation in the scheme, the Working Group meeting in July 2010 discussed and agreed that the existing arrangement of printing the names of management companies and incorporated owners associations on the certificates should suffice.

- 3.3** Mr. CHAN Sheung Yan, Kenneth added that the QWRSB had been launched for many years covering around 1,100,000 households. The result was encouraging and satisfactory. The Working Group was however exploring ways to encourage more applicants to join the QWRSB.

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4 Publication of Water Quality Data

- 4.1** The Chairman invited Mr. CHAN Kin Man of WSD to report the latest progress of publication of water quality data of Dongjiang water received in Hong Kong at Muk Wu Pumping Station and of drinking water in Hong Kong. Mr. CHAN reported that the Working Group on Publication of Water Quality Data had held two meetings in June and November 2010 to endorse the water quality data for the periods from 1 April 2009 to 31 March 2010 and from 1 October 2009 to 30 September 2010 respectively. The aforementioned water quality data were uploaded to WSD's website in June and December 2010 respectively.

- 4.2** Mr. CHAN also reported that the quality of both Dongjiang water and drinking water complied 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, 2006"(WHO 2006) respectively.

- 4.3** Mr. CHAN informed the meeting that the next publication of updated water quality data from 1 April 2010 to 31 March 2011 was scheduled for June 2011 after endorsement by the Working Group.

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- 4.4** Mr. CHAN further reported that WSD had installed and commissioned a newly procured advanced instrument, "Gas Chromatograph with Triple Quadruple Mass Spectrometers", for analysing at nanogram level one of the

two new parameters, namely N-nitrosodimethylamine (NDMA) introduced in the WHO's "Guidelines for Drinking-water Quality, 2008" (WHO 2008). He added that the method validation work for NDMA as well as for Sodium Dichloroisocyanurate, the other new parameter, was currently in progress. It was anticipated that the quality of drinking water supply in Hong Kong would be monitored in accordance with the WHO 2008 with effect from April 2011.

- 4.5** Dr. CHEUNG Yun Hing, Richard said that in response to some media reports on the publication of water quality data, WSD presented a paper in the Working Group meeting in November 2010, addressing the issues concerned and that Members could refer to item 5 of the minutes of the Working Group meeting for details of the discussion.

5 Visit to Guangdong

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

- 5.2** Mr. NG stated that a delegation of the ACQWS comprising 13 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 23 and 24 November 2010. The delegation visited key installations of the Dongshen Water Supply Improvement Works, Shima River Sewage Diversion Works, Shenzhen Reservoir Catchment Area Sewage Interception Works, Shenzhen Reservoir Bio-nitrification Plant and Sanzheng Sewage Treatment Plant. A press conference was held upon members' return to Hong Kong in the afternoon of 24 November 2010. The Chairman and six members, namely, Mr. CHAN Sheung Yan, Kenneth, Dr. CHEUNG Yun Hing, Richard, Ms. FONG Kwok Shan, Christine, Ms. SO Yee Ching, Mr. WONG Siu Wai, Kenny 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 appreciated the huge efforts made by relevant Guangdong water authorities in protecting water resources of Dongjiang. Mr. NG mentioned that a similar visit to Dongjiang would be arranged in October/ November in 2011.

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6 Use of Reclaimed Water

- 6.1** The Chairman invited Mr. NG Mang Tung, Bobby to brief members on the latest progress of all the follow-ups on the use of reclaimed water. Mr. NG reported that two meetings of the Technical Sub-Group (TSG) were held on 15 April 2010 and 13 July 2010 respectively. TSG members agreed to conduct further studies on the issues summarized below, and in particular, on how to reduce the cost of reclaimed water supply to Sheung Shui and Fanling.:

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- to identify suitable applications of reclaimed water and to

- recommend reclaimed water quality standard;
- to identify the most effective technology to be used; and
- to work out the unit production cost of reclaimed water supply.

6.2 Prof. CHAU Kwai Cheong asked whether the cost of supply of reclaimed water for irrigation uses would be recovered from the consumers. Mr NG said that as the use of reclaimed water was still in the development stage, discussion about cost recovery of reclaimed water supply for irrigation or flushing purposes should be considered only upon completion of the developed scheme and after the public had been engaged.

6.3 Ms. WONG Pik Yan, Nicole noted that DSD had implemented a similar scheme for reclaimed water and asked whether there were any duplication of efforts and any communication problems between departments concerned. Mr. NG advised that the aforementioned TSG included members from DSD, EPD and WSD and that it was tasked 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. The TSG would co-ordinate inter-departmental efforts to explore ways and means to cut down the cost of reclaimed water supply for provision of reclaimed water for toilet flushing and other non-potable uses.

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 situation. Mr. NG stated that members reached a consensus in the last meeting to extend the existing TOR to cover matters relating to both water resources and the water quality of water supplies. Mr. NG reported that the review of existing TOR was completed and tabled two options of the new TOR and associated name of the Committee for discussion as follows:

Option 1

Advisory Committee on the Quality and Resources 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 the quality and resources of water supplies.

水質及水資源事務諮詢委員會

檢討供水水質及水資源事宜，並透過水務署署長給香港特別行政區政府提供意見。

Option 2

Advisory Committee on the 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 the quality, resources and conservation of water supplies.

供水質事務諮詢委員會

檢討供水水質，水資源及節約用水事宜，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 asked members to give comments on Mr. NG's suggested options. The views and comments of members were summarized as follows:

- (a) The Chairman opined and members agreed that as "resources" should have encompassed the meaning of "conservation", Option 1 was considered more concise and thus more preferable. Members agreed that Option 1 should be a preferred option.
- (b) Prof. CHAU Kwai Cheong opined and members agreed that "resources" should have a broader meaning than "quality" and thus should precede "quality" in the new TOR.
- (c) In response to members' view that "resources" might also encompass the meaning of "quality", Mr. MA Lee Tak stated that since the Committee was originally established to review and advise on matters relating to quality of water supplies, the word "quality" should be retained for continuity and to address public's concern about water quality. Ms. LEE Kwun Yee, Kenny echoed that "quality" should be retained in the TOR to maintain public's confidence in water supplies.
- (d) After further detailed deliberation over the wording and meaning of the new TOR and the name of the Committee, Mr. MA suggested and members agreed that the new name and TOR of the Committee should be as follows:

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。

7.3 The Chairman requested WSD to seek endorsement from Development Bureau on the agreed new name and TOR of the Committee. **WSD**

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) Schools which had actively taken part in various water conservation events/activities were being short-listed for selection as model schools. The selection criteria of model schools were being finalised.

- (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 40 schools expressing interest in joining. A certificate presentation ceremony was held on 6 July 2010 for awarding certificates to 452 water conservation ambassadors in recognition of their participation and contribution in the Scheme.
- (c) The latest meeting of the Working Group on Public Education was held on 27 September 2010. Suggestions from members on public education aspect were being followed up.

8.2 Ms. WONG Pik Yan, Nicole stated that the working group would focus on public education on water conservation in order to encourage our younger generation to appreciate the need for water conservation and develop water saving habits. Ms. WONG also informed the meeting that the working group was reviewing the effectiveness of the scheme on “Water Conservation Starts from Home” for primary school and exploring the possibility of extending the activities to secondary schools.

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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 latest progress about the implementation of WELS. Mr. NG reported that:

- (a) Registration of showers under WELS had commenced in September 2009. Up to end January 2011, 132 showers had been registered.
- (b) Registration of water taps under WELS had commenced in September 2010. Up to end January 2011, 15 water taps had been registered.
- (c) Consultation on the draft scheme document for WELS on washing machines had been completed and the scheme document had been finalized and submitted to the World Trade Organization for clearance of its Committee on Technical Barriers to Trade. The registration of washing machines was scheduled to commence in March 2011.

10 Paperless Meeting Initiative in Committee’s Meetings

10.1 The Chairman invited Mr. NG Mang Tung, Bobby to brief members on the paperless meeting initiative.

10.2 Mr. NG reported that as the paperless meeting initiative was not to be pursued at this stage, paperless practice had been adopted in ACQWS meetings as far as possible, e.g. distribution of soft copy of minutes of meeting, use of emails for communication and use of Powerpoint for presentation during meetings. In view of this, the item would be deleted.

Any Other Business

11.1 Mr. YAU Hau Yin and Mr. LAM Man Pang attended the meeting respectively on “Management and reduction of water main bursts and leaks” and “Water meter management and control of fresh water losses in residential developments”.

11.2 Mr. CHAN Man Kin expressed his appreciation of the efforts WSD made in reducing the frequency of main bursts and leaks, in employing new technologies on water main leakage detection and pressure management measures and improving performance of road opening works. Mr. CHAN suggested more work should be done to enhance public’s awareness of WSD’s efforts. Mr. CHAN also requested if visits to relevant work sites could be arranged for members. The Chairman commented that as members might not have time for site visits, WSD could also arrange to produce a video containing the application of new technologies for members’ information. Mr. MA welcomed the suggestions. He stated that WSD had incorporated promotion materials in WSD’s public education programme and would make more efforts in this respect to maintain public enthusiasm. He also agreed to arrange for site visits and distribution of the presentation materials and related information on water mains replacement and rehabilitation works and leakage detection works etc in due course.

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(Post-meeting notes: A disc containing the following information was sent out in end March 2011:

1. Presentation on Managing and reducing burst and leak
2. Presentation on Control of Water Losses in Residential Developments
3. Video on Cured in Place Pipe (CIPP)
4. Video on Close-fit lining
5. Paper on Leakage Detection Technique.)

11.3 Ms. HO Siu Fong, Betty expressed her support to the idea of charging consumers and their agents for water loss due to leakage of inside service as an incentive for the parties concerned to carry out timely repair. Ms. HO added that some management companies might encounter difficulties to locate the leaking mains and asked if WSD could assist to locate/detect the leaked main, repair the leaked mains and charge the management companies for the associated costs. Mr. MA agreed that some building developments had certain technical difficulties in carrying out the associated maintenance works and in some special circumstances, WSD would offer assistance. However, WSD found it difficult to provide leakage detection or pipe repair services to all buildings due to limited resources available. He added that in the private sector, there were companies with the necessary knowhow for providing leakage detection and mains repair services and that WSD would encourage building owners to widely use such services. He also added that it was quite difficult to accurately detect the seepage through floor slabs between building units using the equipment currently available in the

market. Nevertheless, WSD would seek assistance from universities/institutes to conduct research on new technologies for detecting seepage more accurately.

- 11.4** Ms. FONG Kwok Shan, Christine noted that the underground utilities were very congested and suggested WSD to use the electronic means to capture the underground utilities situation so that all relevant parties could share the useful information. Mr. MA stated that an electronic utilities record system had already been in use and relevant parties could access the system and retrieve useful utilities records before carrying road opening works. Opportunities would also be taken to update the records based on actual conditions as revealed on site.
- 11.5** Mr. POON Lock Kee, Rocky asked whether there was any plan to implement levying measures to charge substantial pipe leakage loss within building developments. Mr. MA stated that to address the pipe leakage problems, the main tasks of WSD were to renew the public water main networks and to reduce the associated leakage to an acceptable level. Secondly, WSD would work on ways to motivate building owners to enhance their efforts in maintenance of inside services of buildings in a manner similar to the improvement of general building maintenance. After positive results were obtained in these respects, proposals of levying measures might be considered. Such proposals would need to be generally accepted by the public and the Legislative Council.
- 11.6** Mr. POON Lock Kee, Rocky noted that WSD had introduced the master meter system and asked if there was any incentive to encourage the building management companies of large housing estates to install master meters. Mr. POON also noted that WSD had selected some districts of the water distribution network to install the flow-modulated pressure reducing valves under the pressure management scheme (PMS) in order to regulate water pressure within the area and hence to reduce water leakage. Mr. POON asked if WSD had set up any centralized computer system to analyse the data collected, to detect mains leakage and to adjust the district pressure automatically. Mr. MA replied that since the launching of the master metering policy, the installation of a master meter had become one of the water supply requirements for new developments. Mr. MA also stated that the development of PMS was in an early stage on a district level. As the flow quantities were found quite steady, it would suffice to pre-set the district pressure based on the flow measured in advance. Therefore, instant transmission of data for adjusting the district pressure was not required. For leakage detection, WSD had installed noise loggers at some locations of the water distribution network. Noise loggers could automatically transmit instant leak noise data to the control centre through GSM network to facilitate leak detection and even to prevent main bursts.
- 11.7** Ms. LEE Kwun Yee, Kenny asked about the rationale behind the policy of installation of noise loggers. Mr. MA stated that as noise loggers were quite costly, it made economic sense to install noise loggers only at critical

locations deemed necessary, such as at crossings of red routes and pink routes.

11.8 Prof. YU Chai Mei suggested on behalf of the Friends of the Earth to exchange the experiences on water conservation in China with members of ACQWS in the next meeting. The Chairman said that as there would be a lot of items to be discussed, such exchange discussion could be arranged in future meetings should time permit. **WSD**

11.9 The Chairman said that because of time limitation, he suggested to defer the discussion of the mains leakage within large building estates and presentation of new technology to the next meeting. **WSD**

12 Members did not raise any other items. The Chairman thanked members for attending the meeting. The Meeting was adjourned at 4:45 pm.