

**Advisory Committee on the Quality of Water Supplies**  
**Minutes of Meeting No. 19**

**Date:** 8 March 2010 (Monday)

**Time:** 9:45 a.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	Vice-Chairman, Director of Water Supplies
Dr. CHAN Hon Fai	Cinotech Consultants Limited
Mr. WONG Kwok Hay, Samuel	Wong & Fok Solicitors
Mr. CHAN Sheung Yan, Kenneth	Chun Lee Engineering Co. Ltd.
Ms. WONG Pik Yan, Nicole	World Wide Fund for Nature Hong Kong
Mr. CHAN Han Pan	Tsuen Wan District Council
Mr. POON Lock Kee, Rocky	NWS Engineering Group Ltd.
Dr. SHIN Kam Shing, Paul	The City University of Hong Kong
Prof. WONG Chun Yu, Benjamin	The University of Hong Kong
Ms. TONG Po Chun	Sha Tin District Council
Ms. HO Siu Fong, Betty	Plan Arch Consultants Ltd.
Prof. CHEN Yongqin, David	The Chinese University of Hong Kong
Dr. LEUNG Ting Hung	Consultant Community Medicine, Department of Health
Mr. TANG Kin Fai	Assistant Director, Environmental Protection Department
Mr. CHUI Wing Wah	Principal Assistant Secretary, Development Bureau
Mr. WONG Yee Shing, Sam	Secretary Engineer, Water Supplies Department

**Water Supplies Department Representatives in Attendance**

Mr. NG Mang Tung, Bobby	Assistant Director, Water Supplies Department
Mr. CHAN Kin Man	Chief Chemist, Water Supplies Department
Mr. LAU Kan Kwok	Senior Engineer, Water Supplies Department
Mr. SUEN Kwok Keung	Senior Engineer, Water Supplies Department
Mr. CHEUNG Hung Cheong	Engineer, Water Supplies Department (Notes Taker)

**Absent with Apologies**

Prof. YU Chai Mei, Jimmy	The Chinese University of Hong Kong
Ms. WONG Wai Lan, Luciana	LNS Ltd.
Mr. LAM Ka Fai, Aaron	Sham Shui Po District Council
Dr. NG Cho Nam	The University of Hong Kong
Ms. CHU Lan Ying	Assistant Director, Food and Environmental Hygiene Department
Mr. MA Kam Chuen	Chief Manager, Estate Management Housing Department
Mr. CHAN Kwong Wei, Samuel	Deputy Director, Water Supplies Department

**Opening Remarks**

- 1.1 The Chairman welcomed all Members and representatives from Water Supplies Department (WSD) to the 19<sup>th</sup> Meeting. The Chairman pointed out that the appointment of non-official members to advisory and statutory bodies followed government's 6-year rule which stated that a non-official member of an advisory and statutory body should, as a general rule, not serve on the same body in any one capacity for more than six years. He wished to thank the Committee members who were going to retire under this rule.
- 1.2 The Chairman also informed the meeting that Prof. CHEN Yongqin, David, Dr. NG Cho Nam, Prof. YU Chai Mei, Jimmy, Ms. WONG Wai Lan, Luciana, Mr. LAM Ka Fai, Aaron, the Representative of Food And Environmental Hygiene Department - Ms. CHU Lan Ying and the Representative of Housing Department - Mr. MA Kam Chuen had sent in their apology for not being able to attend the meeting. In particular, he informed the meeting that Mr. Mr. WONG Man Kei had replaced Mr. Vincent MAK Shing Cheung as the Secretary of this Committee. However, Mr. WONG was unable to attend the meeting today as he was now attending an overseas conference. Mr. WONG Yee Shing, Sam would take up the works of Secretary at this meeting.

**Agenda Items****Item 1: Confirmation of the Minutes of the 18th Meeting held on 15 April 2008**

- 2.1 The Secretary sent the draft minutes of the 18th Meeting to Members for comment in July 2009 and hitherto had not received any proposals for amendments. As there was no further amendment proposed at the Meeting, the Chairman announced the minutes of the 18th Meeting being confirmed.

**Item 2: Matters Arising****3.1 Quality of Water in Buildings - Quality Water Recognition Scheme for Buildings (QWRSB)**

- 3.1.1 The Chairman invited Mr. LAU Kan Kwok of WSD to brief Members on the latest progress of all the follow-ups of QWRSB.

- 3.1.2 Mr. LAU Kan Kwok reported on the public's response to the Announcement in the Public Interest (API) broadcasted since May 2008 and the updated number of new applications for the scheme since the launching of the API. Two diagrams showing the number of new certificates issued and the number of households covered by the scheme were distributed to Members at the Meeting. It was observed from the diagrams that:

- (a) The API had come into effect 6 months after its first launching in May 2008 as the no. of new certificates issued for both the private and non-residential sectors had increased rather significantly comparing to that of the public sector. The 6-month delaying effect of the API was due to the fact that in making applications, applicants were required to submit 3 recent records of (i) cleaning of water tank and (ii) inspection of plumbing installations for

WSD's assessment and the shortest time taken to acquire such records was 6 months.

- (b) The number of new certificates issued and the number of households covered by the Scheme were on the increasing trend.

**3.1.3** The Chairman asked Members to give comments on Mr. LAU's report. The views and comments of Members were summarised as follows:

- (a) Prof. CHEN Yongqin, David enquired about the age of buildings that had participated QWRSB and asked if old buildings were encouraged to participate. Mr. LAU responded that there was no statistics on the age of buildings that had participated QWRSB. So far, most of the participants were buildings with building management agents and/or owners' corporation. Those small-scale old buildings of the private sector were usually without building management agents and/or owners' corporation and were lacking of a building owner who would take the lead to join the scheme. Nevertheless, WSD would accept applications from buildings of any size, new or old, and with or without a management agent/owner's corporation. Mr. LAU also mentioned that the Buildings Department had launched the Building Safety Loan Scheme which would provide loans to individual owners of private buildings who might wish to obtain financial assistance in carrying out maintenance and repair works including plumbing maintenance to reinstate or improve the safety conditions of their buildings. Mr. MA Lee Tak said that an analysis on the age of buildings that **WSD** participated QWRSB should be considered.
- (b) Mr. CHAN Han Pan was of the opinion that more incentive should be given to property owners or management agents to participate the scheme. Mr. MA Lee Tak remarked that QWRSB was a voluntary scheme and certificates were awarded to participants in recognition of their efforts in proper maintenance of their fresh water plumbing systems. To increase participation of the scheme, those contributed towards obtaining the **WSD** certificate should be properly acknowledged in the certificates.
- (c) The Chairman and Ms. HO Siu Fong, Betty noted from the diagram that there was only slight increase in the cumulative number of new resident (public) certificates issued after the API + 6 months period and suggested that the Housing Department and the Housing Authority could encourage more participation of the scheme from the public buildings. Prof. CHEN Yongqin, David reckoned that more and more people had recognized the scheme and its benefits through the API.
- (d) Dr. CHAN Hon Fai suggested that consumers from old buildings should be encouraged to replace the pipes when they filed complaints about discoloured water from their taps. Mr. MA Lee Tak said that the Water Authority would send an inspector to investigate the case and would usually advise the consumer to replace the pipes if the discoloured water was found to be related to the pipes in question.

- (e) Dr. LEUNG Ting Hung enquired about how the coverage of QWRSB could be improved. Mr. LAU Kan Kwok said that the household coverage of the scheme for private and public residents were about 30% and 65% respectively and both were on the increasing trend. He added that the scheme would be reviewed on its effectiveness for improvements from time to time. He re-iterated that new enhancement features had been added to the scheme in 2008. Mr. MA Lee Tak supplemented that the current cumulative number of households covered by new certificates issued was about 1.2 million, i.e. around 3.6 million residents of Hong Kong had participated and benefited from the scheme assuming three members per household, which was an encouraging achievement made so far.
- (f) Members enquired about the criteria for assessment of QWRSB applications. Mr. LAU Kan Kwok replied that the criteria covered mainly three areas of plumbing maintenance, which included the inspection of plumbing systems such as water pipes, filters and water tanks, the cleaning of water tanks and the water quality examination.
- (g) Members enquired about whether the government had the authority to disconnect water supply to a household. Mr. SUEN Kwok Keung replied that the Water Authority had the authority to disconnect an inside service if he was satisfied that waste, misuse or pollution of the water supply had occurred or was likely to occur.
- (h) Ms. HO Siu Fong, Betty suggested that the pipes and fittings of existing buildings should be replaced during building retrofitting. Mr. NG Mang Tung explained that the enactment of the Waterworks (amendment) Regulation 1994 required that steel pipes be properly lined for use as fresh water inside service in all new buildings and upon renewal of the plumbing system in all existing buildings after 23 December 1995. He also said that the Fresh Water Plumbing Maintenance Guide was posted on WSD's Homepage for the viewing of customers and agents on how to inspect and maintain their fresh water plumbing system properly.

**3.1.4** The Chairman thanked Members for their valuable views and also Mr. LAU Kan Kwok for his efforts. In the light of concerns expressed by Members on the overall participation of QWRSB, the Chairman suggested and Members agreed that the scheme should be reviewed periodically.

## **3.2 Publication of Water Quality Data**

**3.2.1** The Chairman invited Mr. CHAN Kin Man of WSD to report the latest progress of publication of water quality data.

**3.2.2** Mr. CHAN Kin Man reported that the Working Group on Publication of Water Quality Data had held meeting on 2 June 2009 and 19 November 2009 respectively to examine the water quality data and briefed the Meeting that:

- (a) The water quality data covering the periods from 1 April 2008 to 31 March 2009 for the Dongjiang water received at Muk Wu P/S and the drinking water in Hong Kong was uploaded to WSD's website on 4 June 2009. 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" (GB3838-2002) and the World Health Organization's Guidelines for Drinking-water Quality of 2006 (WHO 2006) respectively.
- (b) The latest water quality data for the period from 1 October 2008 to 30 September 2009 had also been uploaded to WSD's website on 23 November 2009. The water quality data of both Dongjiang water and drinking water also complied with GB3838-2002 and WHO 2006 respectively.
- (d) The next update of water quality data for the period from 1 April 2009 to 31 March 2010 would be scheduled for May 2010 after endorsement by the Working Group on Publication of Water Quality Data. **WSD**

**3.2.3** Dr. CHAN Hon Fai, the Chairperson of the Working Group on Publication of Water Quality Data, had no further comments to add regarding the data published.

**3.2.4** The views and comments of Members on water quality data were summarised as follows:

- (a) Dr. SHIN Kam Shing, Paul asked if there was any record of visitors to the web or enquiries on water quality from members of the public after publication of water quality data. Mr. CHAN Kin Man said that there was no record of hit counts provided on the water quality data web page; however, there were about 30 public enquiries each year on water quality mainly via emails. Enquiries were made on fluoride, chlorine, hardness of treated water and a range of miscellaneous topics. He also informed members that some enquiries were made by students from tertiary institutes concerning their project assignments. Apart from providing the required information, WSD would also direct all enquirers to the WSD website where the water quality data were published.
- (b) In response to the enquiry of Dr. CHAN Hon Fai, Mr. CHAN Kin Man informed that WSD had closely monitored the levels of ammoniacal nitrogen and total phosphorus. The monitoring results showed that the quality of Dongjiang water had not been affected by the drought situation and there were no observable signs of eutrophication in Shenzhen Reservoir. Mr. NG Mang Tung also added that the satisfactory quality of Dongjiang water was also attributable to the successful flow regulation of Xinfengjiang, Fangshubai and Baipengchu reservoirs to maintain the flow of Dongjiang.

### **3.3 Visit to Guangdong**

**3.3.1** The Chairman briefed Members that the visit report to Dongjiang catchment areas in November 2009 was issued to participating Members on 26 February 2010 and was posted on the Committee's internet Homepage on 1 March 2010. He also invited Mr. NG Mang Tung to report the visit.

- 3.3.2** Mr NG Mang Tung reported that during 9 - 11 November 2009, a delegation of the Committee comprising 9 members and 5 other HKSAR Government officials led by Chairman paid a 3-day visit to the Dongjiang catchment area. Apart from visiting the three major reservoirs in the upstream of Dongjiang namely Fengshuba Reservoir, Xinfengjiang Reservoir and Baipenzhu Reservoir, the delegation also visited Chengnan Domestic Sewerage Treatment Plant, Taiyuan Pumping Station and the Shima River Sewage Diversion Improvement Project. Upon returning to Hong Kong in the afternoon at the end of the visit, a press conference was held in the Conference Room of Murray Building, Central. Attendants were briefed by the Chairman, the Director of Water Supplies and four members, namely, Dr. CHAN Hon Fai, Mr. WONG Kwok Hay, Samuel, Mr. POON Lock Kee, Rocky and Ms. TONG Po Chun on their observations both on the drought situation in Guangdong Province and the water quality of Dongjiang during the 3-day visit. Mr. LAM Tin Sing, Enoch, Deputy Secretary (Works)2 of Development Bureau also joined the press conference. They appealed to the Hong Kong public to conserve water and advised that WSD would step up publicity and education to promote water conservation. A short video highlighting various parts of the visit was also shown. A press release was subsequently issued to the media to inform the public.
- 3.3.3** He supplemented that the Guangdong authorities would make use of the three reservoirs to regulate the flow in the Dongjiang to ensure that the water quality and the water supply to cities and towns along the Dongjiang including Hong Kong would not be affected by drought. He also said that the present water storage in Hong Kong was healthy and with the reliable supply from the Dongjiang, Hong Kong people could enjoy a stable water supply.
- 3.3.4** Mr. NG Mang Tung advised Members that another visit would be arranged later **WSD** this year and WSD would notify Members the details of the visit later through email.

#### **3.4 Use of Reclaimed Water**

**3.4.1** Mr. NG Mang Tung reported that:

- (a) Pilot schemes of water reclamation in Ngong Ping and Shek Wu Hui had been carried out and the reclaimed water had been used for toilet flushing and irrigation. The results of surveys on public acceptance of the use of reclaimed water under the two pilot schemes were favourable.
- (b) WSD had formed an inter-departmental Working Group and Technical Sub-Group to explore on the possible provision of reclaimed water from the Shek Wu Hui Sewage Treatment Works to Sheung Shui and Fanling areas for toilet and other non-potable uses. The 1<sup>st</sup> meeting of the Working Group was held in January 2010 and identified three issues for further investigation by the Technical Sub-Group. The issues identified were:
  - to develop a suitable reclaimed water quality standard;
  - to identify the most suitable technology to be used and carry out necessary pilot tests; and

- to work out the unit cost of reclaimed water supply.

(c) The 1<sup>st</sup> meeting of the Technical Sub-Group was being arranged to be held in WSD mid April 2010.

**3.4.2** Mr. POON Lock Kee, Rocky opined that the developers should be encouraged to provide facilities in new buildings to use reclaimed water. Mr. NG Mang Tung supplemented that the source of reclaimed water mainly came from grey water collected from baths, wash-basins and kitchen sinks and rainwater, which could be treated for toilet flushing and irrigation.

### **3.5 Terms of reference of the Committee**

**3.5.1** In response to Dr. NG Cho Nam's suggestion in the last Meeting about reviewing the terms of reference of the Committee for the next term to cover water conservation issues besides water quality, the Chairman invited Mr. NG Mang Tung to brief the Meeting on this issue.

**3.5.2** Mr. NG Mang Tung reported that the Government had considered the water conservation and protection of environment issues in preparing the water conservation strategy and discussion of such issues would continue in future ACQWS Meetings. He was of the opinion that there was no urgency of amending the terms of reference at the moment.

**3.5.3** Mr. CHUI Wing Wah welcomed Members' enthusiasm regarding water quality, WSD water resources and water conservation issues. He would liaise closely with WSD regarding the suggestion of amending the terms of reference to cover water conservation issues.

**3.5.4** The Chairman said that it was not uncommon to discuss water resources and water conservation issues with officials of Guangdong authorities during Dongjiang visit besides water quality of Dongjiang. He suggested that it would be consistent if such issues were taken into account in the terms of reference and be covered in the press conference.

### **3.6 Water Conservation Campaign for Primary Schools**

**3.6.1** Mr. SUEN Kwok Keung reported that the production of the information/competition kit was nearing completion. The kit would be distributed to schools in March 2010 and briefing sessions for school teachers WSD would be held in April 2010.

**3.6.2** Mr. SUEN Kwok Keung reported that WSD was conducting Phase 2 roadshows for schools and would take the opportunity to identify suitable schools as models WSD for other schools.

**3.6.3** Mr. SUEN Kwok Keung reported that a pilot scheme of the school water audit for WSD 5 primary schools was being carried out during the current academic year. It aimed to educate the young pupils about water conservation through collecting and analyzing water consumption information in their schools and to encourage them to relay the message and best practice of water conservation to their peers and family members.

**3.6.4** Mr. SUEN Kwok Keung reported that WSD was planning for the certificate WSD

presentation ceremony for school water conservation ambassadors.

**3.6.5** The Chairman thanked Mr. SUEN Kwok Keung for his report and invited Members for comments. The views and comments of Members were summarised as follows:

- (a) Ms. WONG Pik Yan, Nicole suggested that WSD should introduce in its school roadshows the concept of transboundary water to students as Hong Kong was using Dongjiang water from Guangdong. She also suggested that the concept of carbon footprint could be included in the total water management as a means to save energy for the world.
- (b) Mr. MA Lee Tak said that consumers could be educated in using less flushing water (90 litres per day as compared to 130 litres of fresh water per day per person) in terms of carbon footprint to save energy for the world.
- (c) Dr. SHIN Kam Shing, Paul suggested that water conservation should also be promoted to universities as most of them had set up environmental offices. Mr. MA Lee Tak said that WSD was considering the organizing of a water conservation campaign for universities, which would include design competitions on water saving devices and water saving methods. He welcomed suggestions and assistance from Members and non-government organizations in organizing the design competitions.
- (d) The Chairman suggested that the Working Group on Public Education should **WSD** collect suggestions from Members in devising public education plans.

**3.7 The Hong Kong Voluntary Water Efficiency Labelling Scheme (WELS) on washing machines and water taps**

**3.7.1** The Chairman invited Mr. NG Mang Tung to brief the meeting on the latest situation about the implementation of WELS. Mr. NG Mang Tung reported that:

- (a) WSD was implementing a voluntary "Water Efficiency Labelling Scheme" (WELS) to facilitate consumers to select water saving devices. WELS aimed to inform consumers the level of water consumption and efficiency of plumbing fixtures and appliances.
- (b) Implementation of WELS would take place by phases for different groups of products. The first product for implementation of WELS was shower for bathing. The registration of showers for bathing under WELS had commenced in September 2009 and up to end February 2010, 14 showers had been registered under the WELS scheme
- (c) 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 as a "voluntary" approach in the first instance.
- (d) The water efficiencies of the showers were rated to different grades according to their nominal flow rates from less than or equal to 9



litres/minute to 16 litres/minute or greater. Grade 1 was the most water efficient whereas Grade 4 was the least water efficient.

**3.7.2** The views and comments of Members on showers were summarised as follows:

- (a) Mr. MA Lee Tak noted that it was difficult to find shops selling the registered showers making the products not readily available to general public. He would expect suppliers to do more promotion work in consumer market rather than selling the products mainly to developers.
- (b) Ms. HO Siu Fong, Betty suggested that consumers and developers should be educated more on the relationship between the flow rate and the comfort of showers in order to change their buying habits.
- (c) The Chairman suggested that the participation of government departments in using registered showers in offices, sports centres, toilets and schools etc. should be promoted. Mr. MA Lee Tak said that WSD had obtained funds and awarded four contracts in December 2009 to retrofit plumbing appurtenance with water saving devices in Government buildings and schools.
- (d) Ms. TONG Po Chun quoted that water was wasted in great quantities due to frequent occurrence of main bursts in Hong Kong. She suggested WSD should put more effort on the replacement of water mains. Mr. MA Lee Tak said that WSD had launched a comprehensive and systemic replacement and rehabilitation (R&R) programme to replace or rehabilitate about 3 000 kilometres of aged water mains in 15 years (originally in a 20-year period) from 2000 to 2015 to improve the condition of the water supply network. He also said that it would be difficult to accelerate the R&R programme due to the prevailing constraints such as traffic and construction activities of others. Currently, the work completion rate was maintained at an average of about 30 km per month. Mr. MA Lee Tak also said that WSD had stepped up leak detections to identify leaks in water mains at an early stage so as to prevent main bursts and would employ a new technique from overseas that would enable inspection of the internal condition of water mains and detection of leaks and defects by a CCTV camera and a leakage detection sensor in the water supply network in the form of a pilot scheme starting by end 2010.
- (e) Mr. WONG Kwok Hay, Samuel enquired about the use of pressure reducing valves in reducing main bursts. Mr. MA Lee Tak said that the use of pressure reducing valves in reducing main bursts was effective, however, the congestion of underground utilities had been hampering the progress of installing pressure reducing valves.

**3.7.3** Mr. NG Mang Tung reported that:

- (a) The second and third products for implementation of WELS were water taps **WSD** and washing machines. It was expected that registration of the two products

would commence by end 2010.

- (b) The trade members were closely consulted throughout the entire scheme development process. For the sake of widening the consultation to cover all the other interested parties, the draft scheme document for water taps had been uploaded to the Business Consultation e-Platform operated by the Economic Analysis and Business Facilitation Unit of the Financial Secretary's Office under the GovHK website.

### **Item 3: Any Other Business**

#### **4 Paperless Meeting Initiative in Committee's Meetings**

- 4.1** The Chairman informed Members that the Government would like to explore the feasibility of holding meetings in a paperless mode with computers. The Chairman invited Mr. NG Mang Tung to brief Members on the paperless meeting initiative.
  - 4.2** Mr. NG reported that conversion of the conference room was required and each participant would be provided with a notebook or the like during the meeting. He thanked members for their prompt reply to the Secretary's e-mail seeking their view on the initiative. He said that all responded members supported the proposal. Details of the proposal were now being worked out. The Secretary **WSD** would inform members once a decision was made.
- 5** Member did not raise any other items. The Chairman thanked Members for attending the Meeting. The Meeting was adjourned at 12:15 pm.