

Advisory Committee on Water Supplies
Minutes of Meeting No. 1

Date: 29 June 2016 (Wednesday)

Time: 2:30 p.m.

Venue: Room 4819, Water Supplies Department, 48/F, Immigration Tower,
7 Gloucester Road, Wan Chai, Hong Kong

Present

Dr CHAN Hon Fai	Chairman
Mr LAM Tin Sing, Enoch	Vice-Chairman (Water Supplies Department)
Prof WONG Wing Tak	Working Group Chairman
Prof CHENG Man Chung, Daniel	Working Group Chairman
Dr MAN Chi Sum	Working Group Chairman
Sr WONG Bay	Working Group Vice-Chairman
Prof CHAN Yan Keung, Thomas	Member
Prof LI Xiao Yan	Member
Dr LEE Ka Yan, David	Member
Dr WONG Siu Wing, Eric	Member
Dr WONG TAAM Chi Woon, Vivian	Member
Ms KWAN Sau Ling	Member
Ms LAM Yuk Chun	Member
Mr LAU Yuet Fan, Ivan	Member
Mr MAK Shing Cheung Vincent	Member's representative (Development Bureau)
Mr FORK Ping Lam	Member (Food and Environmental Hygiene Department)
Dr CHING Cheuk Tuen, Regina	Member (Department of Health)
Ms YEUNG Kwong Yim, Connie	Member (Housing Department)
Mr IP Chit Ki	Secretary (Water Supplies Department)

Water Supplies Department Representatives in Attendance

Mr LEUNG Chung Lap, Michael	Assistant Director, Water Supplies Department
Mr CHAU Sai Wai	Chief Engineer, Water Supplies Department
Mr LEUNG Man Hon, Clement	Chief Electrical & Mechanical Engineer, Water Supplies Department
Mr KWOK Yau Ting, Kelvin	Chief Chemist, Water Supplies Department
Mr CATLIN Kit Wai, Stephen	Senior Engineer, Water Supplies Department
Mr PANG Kwok Fan, Gabriel	Senior Engineer, Water Supplies Department

Mr TSANG Chung Man, Alex	Senior Engineer, Water Supplies Department
Mr HO Sing Yiu	Senior Chemist, Water Supplies Department
Mr YU Man Tat	Senior Chemist, Water Supplies Department
Mr CHENG Chun Wai	Engineer, Water Supplies Department
Mr LEE Hong Kin, Kevin	Engineer, Water Supplies Department
Ms LAW Ming Chu, Cecilia	Engineer, Water Supplies Department (Notes Taker)

Absent with Apologies

Prof CHIU Pauline	Member
Prof KWAN Kai Cho, Joseph	Member
Dr LAU Wai Neng, Michael	Member
Mr CHAN Kwok Wai	Member
Mr TAM Kwok Wing, Ivan	Member
Ms TONG Po Chun	Member
Ms WONG Pik Kiu	Member
Mr YEUNG Wai Sing	Member
Mr WONG Tak Wai, David	Member (Environmental Protection Department)

Item

Opening Remarks

- 1.1 The Chairman welcomed all the Members to the Advisory Committee on Water Supplies (ACWS) Meeting No. 1.
- 1.2 The Chairman informed the meeting that Prof CHIU Pauline, Prof KWAN Kai Cho, Joseph, Dr LAU Wai Neng, Michael, Mr CHAN Kwok Wai, Mr TAM Kwok Wing, Ivan, Ms. TONG Po Chun, Ms WONG Pik Kiu, Mr YEUNG Wai Sing and Mr WONG Tak Wai, David had sent in their apology for not being able to attend the meeting.

Agenda Items

Confirmation of Minutes of Last Meeting (ACRQWS Meeting No. 8)

- 2.1 The Chairman remarked that the consolidated draft minutes of the meeting no. 8 had been circulated to the Members on 23 June 2016 and no further comment

was received before the meeting. There being no further amendment proposed at the meeting, the Chairman announced that the consolidated draft minutes of the meeting no. 8 sent to the Member on 23.6.2016 were confirmed.

Matters Arising

3. Membership for Working Group for the New Term (2016-18)

- 3.1 The Chairman invited Mr IP Chit Ki of Water Supplies Department (WSD) to brief the Members on the list of members of Working Groups (WGs). Mr IP reported that the number of members joining the WGs on Water Quality, Water Resources and Water Conservation were 23, 12 and 13 respectively. Mr Ip reminded the Members that they were always welcome to join the meetings of the WGs if they wish to, even though they were not the members of the WGs. The Chairman encouraged the Members to join all the WGs.

4. Working Group on Water Quality

- 4.1 The Chairman invited Prof WONG Wing Tak, Chairman of WG on Water Quality, to report the summary of the first WG meeting which had been held on 10 May 2016.

Publication of Water Quality Data

- 4.2 Prof WONG reported that WSD had submitted the water quality data of Dongjiang water received at Muk Wu Pumping Station for the period from April 2015 to March 2016 and the drinking water quality for the same period at the meeting.
- 4.3 Prof WONG reported that the average values of all parameters for checking compliance of Dongjiang water quality had met the national standard values set out for Type II waters under the “Environmental Quality Standards for Surface Water GB3838-2002” . The publication of the “Report on water quality data of Dongjiang water received in Hong Kong at Muk Wu Pumping Station” for the period from April 2015 to March 2016 had been endorsed.
- 4.4 Prof WONG reported that the quality of drinking water supply for the period from April 2015 to March 2016 had complied fully with the World Health Organization’s Guidelines for Drinking-water Quality (WHO 2011).

- 4.5 Prof WONG reported that, after deliberation at the WG meeting, it had been suggested that the lead monitoring data of drinking water for samples taken up to the connection points and those taken at consumer taps for the period from April 2015 to March 2016 should be separately provided for public reference in view that the slightly elevated lead sampling result was not within WSD's distribution system.
- 4.6 Prof WONG reported that the revised report on drinking water quality for the period from April 2015 to March 2016 had been circulated to WG members for their comments on 20 June 2016 and had been subsequently agreed by all the members.
- 4.7 Dr CHING Cheuk Tuen, Regina of Department of Health (DH) enquired about the number and the randomness of water sampling as consistently negative results from the same sampling points might not be generalizable for the whole of Hong Kong. Mr KWOK Yau Ting, Kelvin of WSD replied that the WSD had collected 1300 samples at publicly accessible points for testing lead content. Their locations covered 18 District Council districts of Hong Kong and from all the four types of buildings including:
- (i) public rental housing
 - (ii) private residential building
 - (iii) public utilities
 - (iv) commercial buildings.
- 4.8 Prof CHAN Yan Keung, Thomas suggested the WSD to take water samples from taps where people used for drinking (i.e. from kitchen instead of toilet). Prof CHENG Man Chung, Daniel further suggested WSD to provide incentives such as sponsors for the first water sample to be taken at private residential households. Mr LAM Tin Sing, Enoch of WSD responded that all the suggestions could be discussed in more details in the WG meetings. WSD

Quality Water Supply Scheme for Buildings – Fresh Water (Plus)

- 4.9 Prof WONG reported that up to 28 June 2016, 347 applications had been received of which 211 had been approved whilst 94 applications requiring submission of additional documents. There were 42 applications being processed. Among the approved applications, 82 and 1 were from private and public housings respectively. A summary of applications was as follows:

<i>Type of buildings</i>	<i>No. of applications received</i>	<i>No. of applications being processed</i>	<i>No. of applications requiring additional documents</i>	<i>No. of applications awarded</i>
Public residential	7	0	6	1
Private residential	130	12	36	82
Non-residential	210	30	52	128
Overall:	347	42	94	211

Proposed Voluntary Leak Detection of Underground Fresh Water Inside Service Scheme

- 4.10 Prof WONG reported that a preliminary outline of the proposed leak detection scheme had been introduced at the WG meeting on 10 May 2016. The main purpose of the proposed scheme was to encourage the agent to conduct leak detection for the inside service with a view to saving water from leakage.
- 4.11 Prof WONG reported that a meeting with the representatives of Hong Kong Association of Property Management Companies had been held on 24 May 2016 to introduce the preliminary outline of the proposed scheme and to collect their views on the proposal.

5. Working Group on Water Resources

- 5.1 The Chairman invited Prof CHENG Man Chung, Daniel, Chairman of WG on Water Resources to report the summary of the first WG meeting which had been held on 3 June 2016.

Work Plan for 2016-18

- 5.2 Prof CHENG reported that the work plan had been prepared based on the latest Terms of Reference of the WG and items of the plan included:
- (i) Water Intelligent Network (WIN)
 - (ii) Review of TWM Strategy
 - (iii) Seawater Desalination
 - (iv) Use of Reclaimed Water
 - (v) Grey Water Reuse and Rainwater Harvesting
 - (vi) Sponge City Concept

- 5.3 Prof CHENG reported that a work item regarding the Sponge City Concept had been included in the work plan in view of its rapid development in China. The WG would look at its potential applications in Hong Kong. The WG Members had no comment on the above work plan, which had been endorsed.

Review of TWM Strategy

- 5.4 Prof CHENG reported that the Consultants for the TWM review had given a presentation on the supply and demand models and the preliminary findings of the Domestic Water Consumption Survey 2015. The Consultants had also briefed the members on the latest progress of the TWM Review and highlighted a number of supply and demand management measures on utilising local resources and water loss management for collecting WG members' view and advice. Discussed items included:

- (i) Utilisation of local water resources, e.g. urban runoff (including drainage tunnel) harvesting, expansion of water gathering grounds within Country Parks, increasing storage capacity by building new reservoirs and use of raw water for non-potable purposes.
- (ii) Reduction of private mains leakage, e.g. voluntary leak detection scheme, master metering policy, incentive schemes for property management companies, and judicial measures.
- (iii) Sponge City concept - distributed storage of water resources in addition to bulk storage, pilot water harvesting system under Happy Valley Underground Stormwater Storage Scheme for non-potable uses.

- 5.5 Mr LAM Tin Sing, Enoch of WSD remarked that the government project of Anderson Road had incorporated the Sponge City concept in the design. Mr LAM suggested organizing a briefing session of the project for the interested WG members. The Chairman agreed that the departments concerned should be invited to brief the members on the project at the WG on Water Resources.

WSD

Study on Water Consumption Pattern / Habit of Hong Kong People

- 5.6 Prof CHENG reported that some questions had been set out in the Domestic Water Consumption Survey 2015 to collect information on the general public's water consumption patterns, e.g. the uses of the first draw in every morning and

WSD

the time for keeping water tap running before taking water for use. According to preliminary findings, around 5-6% of surveyed households had used the first draw of tap water for potable purposes and around 12-16% of surveyed households had let the taps run for a moment before using the water. Survey data was still being analysed and findings would be presented once available.

- 5.7 Dr WONG Siu Wing, Eric reminded WSD on the privacy of the data collected when WIN and smart meters were implemented. WSD

6. Working Group on Water Conservation

- 6.1 The Chairman invited Dr MAN Chi Sum, Chairman of WG on Water Conservation to report the summary of the first WG meeting which had been held on 27 June 2016.

Work Plan for 2016-18

- 6.2 Dr MAN reported that the work plan had been prepared and the work items included:

Hardware Measures

- (i) Mandatory use of WELS Products
- (ii) Proposed quality scheme –inside services leak detection
- (iii) Flow controller installation works in household
- (iv) Best practice guidelines for catering and hotels

Software Measures

- (i) Water Conservation Week
- (ii) Permanent WREC
- (iii) Education
- (iv) Collaboration and partnership with green groups and other relevant stakeholders

Voluntary Water Efficiency Labelling Scheme (WELS)

- 6.3 Dr MAN reported that up to early June 2016, the progress of registration of water efficient products was as follows:

<i>Type of products</i>	<i>Commencing registration</i>	<i>No. of registered products</i>	
		<i>This report (early June 2016)</i>	<i>Last report (end February 2016)</i>
Showers for bathing	September 2009	210	210
Water taps	September 2010	168	167
Washing machines	March 2011	451	423
Urinal equipment	March 2012	33	31
Flow controllers	August 2014	26	26

Mandatory Use of WELS Products

6.4 Dr MAN reported that the tender for the “Business Impact Assessment (BIA) on Mandatory Use of Designated Products registered under WELS” had been awarded to the consultant firm, ERM Hong Kong Ltd., and the consultancy had commenced on 5 April 2016.

6.5 Dr MAN reported that the consultant had submitted the Inception Report and the Report on Assessment of Business Environment, which had been discussed in the Project Steering Committee (PSC) meeting on 18 May 2016. The subsequent stakeholder engagement processes, which involved face-to-face interviews and focused group discussions, were in progress.

Water Conservation Campaign for Primary Schools

6.6 Dr MAN reported that the school activities previously conducted by WSD had been consolidated into the Integrated Education Programme 「惜水學堂」教育計劃 together with other new initiatives. On average each participating school had organised 3 IEP related activities, with the following activities carried out mostly by schools.

Visit to WREC	95
School Talk / Roadshow	70
Teaching Materials for Classroom Activities	52
Borrow and Display Exhibition Panels	49
Slogan Design	45
School Water Audit	40
Visit to WTW	35

Integrated Education Programme (IEP) 「惜水學堂」教育計劃 on Water Conservation

6.7 Dr MAN reported the status of IEP as follows:

- (i) 173 primary schools had joined the IEP;
- (ii) the pledging ceremony of IEP had been held on 23 January 2016 at PolyU, in which over 300 primary school principals, teachers and students had raised cards together to create an enormous collage of “Cherish Water Campus” and had made a mass pledge to cultivate a water conservation culture amongst the new generation of youth starting from “Cherish Water Campus” with the slogan 「從惜水新學堂做起 協力培育 NEW GEN 節水文化」;
- (iii) three IEP refresher training workshops for teachers had been held on 7, 8 and 10 June and a total of 60 teachers from 34 schools had participated;
- (iv) an IEP award ceremony was being arranged to take place on 18 November 2016 as part of the Water Conservation Week 2016. The number of awards was anticipated to be in the order of 150; and
- (v) preparation of supplementary teaching/learning materials on “water safety” for incorporation in the IEP teaching kit had gone underway with the target of getting them ready for distribution to schools at the beginning of the next 2016/17 school year.

WSD

WSD

Initiative of installing flow controllers at private housing estates

6.8 Dr MAN reported that WSD had partnered up with 4 property management companies, namely Kerry, Urban, City Base and Nan Fung to carry out flow controller installation works in their residential estate clubhouses, with WSD supplying flow controllers and the management offices installing them. 920 flow controllers (196 showers and 724 taps) had been installed in 56 clubhouses managed by the four property management companies;

6.9 Dr MAN reported that the pilot scheme for installing flow controllers at 16 selected public rental housing estates had been completed. A total of 24,190 (45%) households had been installed with flow controllers at their water taps and/or showerheads and that full year billed consumption available for the 16 pilot scheme estates indicate an average saving of more than 15 litres per household per day, representing a reduction of daily per capita domestic water

consumption by about 5 litres based on an average household size of 2.9; and

- 6.10 Dr MAN reported that WSD would continue to install flow controllers in public rental housing estates. As at May 2016, flow controllers had been installed in a further 36,300 households in another 19 estates.

Water Conservation Week (WCW) from 17 to 21 November 2016

- 6.11 Dr MAN reported the status as follows:-
- (i) The Organising Committee (OC) had been reactivated with the third meeting which had been held on 14 June 2016;
 - (ii) The following had been agreed, in principle, at the third OC meeting:
 - (a) Overall event concept and design for stage backdrops, publicity banners, posters, etc.;
 - (b) Programme rundown; and
 - (c) Exhibition themes and design concept.
 - (iii) Refining of designs and event content based on OC members' comments was in progress; and
 - (iv) Confirmation of speakers' and guests' attendance, supporting organisations' and government departments' participation in the carnival was in progress.
- 6.12 The Chairman suggested the target group of domestic helpers and their employers should be included in the water conversation engagement programme. Mr LAM Tin Sing, Enoch replied that WSD had published water conversation leaflet in various languages in previous years and WSD would engage domestic helpers and their employers in future water conversation programme. WSD

Green group collaboration

- 6.13 Dr MAN reported that WSD had been planning to arrange a tea gathering with green groups tentatively for July / August 2016 to have discussions on:
- (i) opportunities to ride on and participate in their activities to promote water conservation to the community;
 - (ii) green groups' interests in arranging short term, special exhibitions in the permanent Water Resources Education Centre;
 - (iii) Other areas of collaboration including:
 - (a) Education for secondary students in the form of other learning experience; and

- (b) Raising domestic helpers' awareness of water conservation

Proposed Voluntary Leak Detection of Underground Fresh Water Inside Service Scheme

- 6.14 Dr MAN reported that the preliminary outline of the proposed scheme had been introduced and discussed in the meeting of the WG on Water Conservation and the WG had supported the proposal in principle.

7. Discussion Paper on Proposed Voluntary Leak Detection of Underground Fresh Water Inside Service Scheme

- 7.1 The Chairman invited Mr IP Chit Ki of WSD to present the paper.
- 7.2 Sr WONG Bay welcomed the proposed scheme as the industry maintenance practice had been moving from "breakdown" to "preventive". Sr WONG also expressed concerns over social impact, cost and time of the scheme. Mr LAM Tin Sing, Enoch of WSD replied that WSD would present to the property management companies the costs associated with 1) regular leak detection work and repair of minor pipe leaks and 2) no leak detection but repair of major pipe leaks or bursts. WSD
- 7.3 Mr. LAU Yuet Fan, Ivan welcomed the scheme as he believed that most of the management agents would only carry out spot maintenance even under the "breakdown" scenario as a full scale replacement programme would not be carried out as it would be much more expensive and would take much longer time.
- 7.4 Prof CHENG Man Chung, Daniel also welcomed the idea as the underground water leakage might affect the structural integrity of the buildings nearby. Prof CHENG suggested WSD to provide management agents incentives such as awards similar to Green Building Awards.
- 7.5 Ms KWAN Sau Ling shared an experience of underground water pipe leakage years ago in which the adjacent building was structurally affected and the leakage water flushed debris into nearby gullies and manholes thus blocking the district's drainage network and caused flooding. Ms KWAN highly welcomed implementation of the scheme which would help prevent similar incidents.

- 7.6 Dr. MAN Chi Sum agreed that the scheme would bring about benefits to the society, yet WSD should provide a range of cost estimates for management agents to consider such as the cost for detection work and pipe repair works of small, medium and large scale. Dr MAN also suggested WSD to provide financial incentive to encourage the management agents to join the scheme such as a quota for free leak detection work.
- 7.7 Dr. WONG TAAM Chi Woon, Vivian suggested WSD to review the current rate of water bills to recover the cost of water loss due to leakage of inside services.
- 7.8 Ms YEUNG Kwong Yim, Connie of Housing Department suggested that the assessment criteria for the proposed scheme should stipulate the recommended minimum age of the underground pipes requiring regular leak detection. Ms YEUNG further suggested WSD to make use of the check meters to assess the condition of the inside services of the housing estates before requesting the management agents to carry out leak detection work.
- 7.9 Prof. CHAN Yan Keung suggested the management agents explain to Owners Cooperations the importance of leak detection.
- 7.10 Mr LAM Tin Sing, Enoch of WSD responded that all the suggestions could be discussed in more details in the WG meetings. WSD

8. Briefing Papers on Water Safety Plan

- 8.1 The Chairman invited Mr YU Man Tak of WSD to present the paper.
- 8.2 Dr CHING Cheuk Tuen, Regina pointed out that the slide 4 on the Safe Water Drinking Framework would convey the message that the water safety plan was initiated by DH setting health-based targets. Dr CHING pointed out that the water safety plan was initiated and developed by WSD with input from DH from the health perspective, during the process of determining the water quality targets. DH's role was to receive regular summary water testing reports from WSD (which routinely monitors drinking water quality data) and provide health advice should there be health-related issues of concern. The slide should be revised accordingly. The Chairman suggested the members to discuss the details in the meeting of WG on Water Quality when the findings from the International Expert Panel were available. WSD

9. Briefing Papers on Solar Panel on Impounding Reservoirs

- 9.1 The Chairman invited Mr LEUNG Man Hon, Clement of WSD to present the paper.
- 9.2 The Chairman suggested WSD to emphasise more on water resources aspects such as how the installation of solar panel could reduce evaporation of water from reservoir surface etc. WSD
- 9.3 The members unanimously supported the installation of solar panel on impounding reservoirs.

Any Other Business

Visit to Dongjiang Water Supply System

- 10.1 Mr IP Chit Ki of WSD briefed the Members on the Dongjiang Water Supply System.
- 10.2 The Chairman suggested WSD to fix the dates and tentative programme for both 2-day and 3-day visit to Dongjiang for the Members to show their preference. WSD

Invitation of Co-opted Members for WGs

- 11.1 Dr MAN Chi Sum suggested inviting some co-opted members to join the WGs in regard to specific issues for a specific period. Dr MAN suggested Chairman of WGs to nominate the co-opted members whilst ACWS could officially issue the invitation. The Members supported the suggestion.
12. There being no further items raised, the Chairman thanked the Members for attending the meeting and adjourned the meeting at 6:15 p.m.