

Advisory Committee on Water Resources and Quality of Water Supplies
Minutes of Meeting No. 8

Date: 22 March 2016 (Tuesday)

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 CHAN Lung Sang	Member
Prof LO Man Chi, Irene	Member
Dr CHEUNG Yun Hing, Richard	Member
Dr LAU Wai Neng, Michael	Member
Dr LEE Ka Yan, David	Member
Dr WONG Siu Wing, Eric	Member
Mr CHIK Wai Keung	Member
Mr LAU Yuet Fan, Ivan	Member
Sr WONG Bay	Member
Mr YEUNG Wai Sing	Member
Mr LEE Kam Hung, Edward	Member & representative (Development Bureau)
Mr WONG Tak Wai, David	Member (Environmental Protection Department)
Mr FORK Ping Lam	Member (Food and Environmental Hygiene Department)
Dr CHING Cheuk Tuen, Regina	Member (Department of Health)
Mr CHAN Yiu Keung, Oliver	Member & representative (Housing Department)
Mr IP Chit Ki	Secretary (Water Supplies Department)
Prof CHAN Yan Keung, Thomas	New Member for the 2016-18 term
Prof KWAN Kai Cho, Joseph	New Member for the 2016-18 term
Prof LI Xiao Yan	New Member for the 2016-18 term
Prof WONG Wing Tak	New Member for the 2016-18 term
Ms KWAN Sau Ling	New Member for the 2016-18 term
Ms LAM Yuk Chun	New Member for the 2016-18 term
Mr TAM Kwok Wing, Ivan	New Member for the 2016-18 term
Ms WONG Pik Kiu, Peggy	New Member for the 2016-18 term

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 KWOK Yau Ting, Kelvin	Chief Chemist, Water Supplies Department
Mr CATLIN Kit Wai, Stephen	Senior Engineer, Water Supplies Department
Mr LAM Shing Tim	Senior Engineer, Water Supplies Department
Mr WONG Man Kei	Senior Engineer, Water Supplies Department
Mr HO Sing Yiu	Senior Chemist, Water Supplies Department
Ms LAM Ka Man, Carman	Engineer, Water Supplies Department(Notes Taker)
Ms LAW Ming Chu, Cecilia	Engineer, Water Supplies Department (Observer)

Absent with Apologies

Prof CHAU Kwai Cheong	Member
Prof CHENG Man Chung, Daniel	Member
Dr MAN Chi Sum	Member
Mr CHAN Kwok Wai	Member
Ms LAU Mei Lo	Member
Ms LAU Pui Yuk	Member
Ms LI Chun Chau	Member
Ms SO Yee Ching, Phyllis	Member
Ms TONG Po Chun	Member
Mr WONG Siu Wai, Kenny	Member
Mr MAK Shing Cheung, Vincent	Member (Development Bureau)
Ms YEUNG Kwong Yim, Connie	Member (Housing Department)

Item

Opening Remarks

- 1.1 The Chairman welcomed all the Members to the Advisory Committee on Water Resources and Quality of Water Supplies (ACRQWS) (Advisory Committee) Meeting No. 8.
- 1.2 The Chairman informed the meeting that Prof CHAU Kwai Cheong, Prof CHENG Man Chung, Daniel, Dr MAN Chi Sum, Mr CHAN Kwok Wai, Ms LAU Mei Lo, Ms LAU Pui Yuk, Ms LI Chun Chau, Ms SO Yee Ching,

Phyllis, Ms TONG Po Chun, Mr WONG Siu Wai, Kenny, Mr MAK Shing Cheung, Vincent and Ms YEUNG Kwong Yim, Connie had sent in their apology for not being able to attend the meeting.

- 1.3 The Chairman noted that some new Members for the 2016-18 term (new Members), including Prof WONG Wing Tak, Prof CHAN Yan Keung, Thomas, Prof KWAN Kai Cho, Joseph, Prof LI Xiao Yan, Mr TAM Kwok Wing, Ivan, Ms KWAN Sau Ling, Ms LAM Yuk Chun and Ms WONG Pik Kiu, Peggy also joined the meeting. The Chairman welcomed the new Members for attending the meeting.
- 1.4 As Agenda No. 6 Matters Arising was only related to the Members of current term 2014-16, the Chairman suggested the new Members could leave from the meeting after discussion of Agenda Nos. 1 to 5 if they wished.
- 1.5 The Chairman extended his welcome to the representatives of Water Supplies Department (WSD) for attending the meeting. The Chairman advised that Mr LEUNG Chung Lap, Michael had replaced Mr CHAU Sai Wai as the Assistant Director/Development of WSD.

Agenda Items

Confirmation of Minutes of Last Meeting (ACRQWS Meeting Nos. 6 and 7)

- 2.1 The Chairman said that the consolidated draft minutes of the meeting nos. 6 and 7 had been circulated to the Members in early March 2016 and no further 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 meeting nos. 6 and 7 were confirmed.

Nomination of Chairmen of Working Groups for the New Term (2016-18)

- 3.1 The Chairman remarked that new Chairmen of the Working Groups (WGs) for the new term had to be elected before the next meetings of WGs scheduled for April/May 2016. He added that in view of the growing

public's concerns on water safety and other emerging issues on water quality in buildings, water resources and water conservation, the current four WGs would be restructured. The two WGs namely: WG on Publication of Water Quality Data and WG on Quality of Water in Buildings would be combined into "Working Group on Water Quality" with new terms of reference; the terms of reference of the WG on Water Resources would be revised and WG on Public Education would be retitled to WG on Water Conservation with revised terms of reference.

- 3.2 The Chairman invited Mr IP Chit Ki of WSD who briefed the Members on the revised terms of reference of the WGs. To cater for the expanded scope of the WG on Water Quality, the Chairman suggested and the Members unanimously agreed that a Vice Chairman was also to be elected for the WG on Water Quality. The Chairman then invited nominations for the new Chairmen of the WGs on (i) Water Quality; (ii) Water Resources; and (iii) Water Conservation, for the new term.

Working Group on Water Quality

- 3.3 The Chairman invited nominations for the new Chairman and Vice-Chairman of the WG. There being no nomination, the Chairman informed the meeting that Mr Richard Cheung, Richard, the current Chairman of the WG on Publication of Water Quality Data would retire from the Advisory Committee by the expiry of the current term. The Chairman drew the Members' attention to the expertise of Prof. WONG Wing Tak in food safety and chemical technology. The Chairman suggested and the Members unanimously agreed that Prof. WONG was to be elected as the Chairman of the WG on Water Quality for the new term.

- 3.4 The Chairman remarked that the WG would also focus on water safety in buildings in respect of plumbing matters. The Chairman drew the Members' attention to the expertise of Sr. WONG Bay in building surveying/maintenance and his experience in the Advisory Committee. The Chairman suggested and the Members unanimously agreed that Sr. WONG to be elected as the Vice Chairman of the WG on Water Quality for the new term.

Working Group on Water Conservation

- 3.5 The Chairman remarked that the revised terms of reference would focus on

collaboration with Green Groups on water conservation and invited nomination for the new Chairman of the WG. There being no nomination, the Chairman drew the Members' attention to the expertise of Dr. MAN Chi Sum, in organising activities to promote green matters. The Chairman suggested and the Members unanimously agreed that Dr. MAN was to be elected as the Chairman of the WG on Water Conservation for the new term.

Working Group on Water Resources

- 3.6 As a result of the election of Dr. MAN Chi Sum as the Chairman of the retitled WG on Water Conservation, the current Chairman position of the WG on Water Resources held by Dr. MAN would be left vacant. The Chairman invited nominations for the new Chairman of the WG. There being no nomination, the Chairman drew the Members' attention to the expertise of Prof. CHENG Man Chung, Daniel in environmental engineering and his experience in the Advisory Committee. The Chairman suggested and the Members unanimously agreed that Prof. CHENG was to be elected as the Chairman of the WG on Water Resources for the new term.

Membership for Working Groups for the New Term (2016-18)

- 4.1 The Chairman invited Mr IP Chit Ki of WSD to report the membership issues for the WGs. Mr IP reported that WG meetings would be attended by the Members of WGs who understand the issues better on a more regular basis. The membership for WGs was on a voluntary basis and non-WG members were always welcome to attend any WG meetings.
- 4.2 As the current membership of the ACRQWS would expire on 31 March 2016, Mr IP Chit Ki said that the secretariat would send an invitation email which listed out the terms of reference and the approximated frequency of meetings for each WG to seek the preferences of the Members for joining the WGs as WG members. The Chairman encouraged the Members to join all the WGs. Mr. LAM Tin Shing, Enoch of WSD added that co-opt/ad-hoc members might also be invited to join the WG meetings on need basis.

[Post-meeting note: The invitation email to all the Members of the new term on joining the WGs was sent on 30 March 2016.]

Schedule of Meetings for 2016

- 5.1 The Chairman suggested the forthcoming meetings should be held every four months on the last Wednesday afternoon of the month to regularize the meetings. The next two meetings would be held at 2:30 p.m. on 29 June 2016 and 26 October 2016 respectively. The Chairman reminded all the Members of the new term to reserve the above time slots. All Members

Information Paper on Overview of Water Quality Standards and Water Sampling Protocols

- 6.1 The Chairman invited Mr HO Sing Yiu of WSD to present on the information paper.
- 6.2 New Members for the new term except Mr. Ivan Tam left the meeting at this juncture as there was no further item related to them.

Matters Arising

7. Quality of Water in Buildings

(i) Enhancement measures of "Quality Water Supply Scheme for Building - Fresh Water"

- 7.1 The Chairman invited Mr IP Chit Ki of WSD to brief the Members on the progress of the enhancement measures.
- 7.2 Mr IP Chit Ki reported that with the support and endorsement of the ACRQWS, WSD launched the enhancement measures of the scheme on 27 December 2015 and the scheme was retitled "Quality Water Supply Scheme for Buildings + Fresh Water (Plus)" (the scheme).
- 7.3 Mr IP Chit Ki reported that there had been 56 nos. application received of which three applicants had been awarded with certificates as at early March 2016.
- 7.4 In addition, Mr IP Chit Ki reported that two seminars had been arranged on 26 February 2016 and 16 March 2016 to explain the details of the scheme and to answer the questions of the property management companies. In total, more than 350 representatives of the companies had attended the

seminars. Mr TAM Kwok Wing, Ivan remarked that the seminars were effective in facilitating the industry to understand the scheme and the feedback from the industry was positive. Mr. Tam added that he would promote the scheme among property management companies.

- 7.5 For public rental housing estates, Mr. CHAN Yiu Keung, Oliver of HD informed that stakeholders and the public had very limited knowledge of the three heavy metals Chromium, Cadmium and Nickel and the possible measures to be taken in case excess of the three metals were detected. HD would further liaise with the WSD before establishing a way forward in this regard. HD & WSD
- 7.6 The Chairman enquired if water sample test results from individual households had been received as required under the Extended Plan of the scheme. Mr IP Chit Ki responded that sample test results for individual households had been submitted by applicants under the Basic Plan. Mr IP remarked that some residents had welcomed property management companies to collect water samples from their taps for participation of the scheme.
- 7.7 The Chairman enquired if WSD had taken into account the sampling uncertainty in samples collected for the scheme, such as when marginally pass water test results were encountered and the corresponding actions by WSD. Mr. LEUNG Chung Lap of WSD replied that the sampling test results had been checked against the WHO standard and multi-samples had been taken at different representative locations to minimize the sampling error. Dr. CHING Cheuk Tuen, Regina of the Department of Health (DH) expressed that there was no absolute safe level for lead in water in public health perspective and the limit of $10 \mu\text{g/l}$ should be regarded as an indication of conditions of insider service requiring rectification. For water quality with lead content below $10 \mu\text{g/l}$, Dr. Ching stated that the health risk of drinking the water would be relatively low. Prof. CHAN Lung Sang shared his concerns on those test results which had marginally passed the WHO standard. Mr LAM Tin Sing, Enoch of WSD reassured the Members that WSD would strictly follow the requirements of the scheme in assessing the application to minimising water sampling error. Moreover, WSD would remind the applicants to employ qualified persons to investigate the cause of test results marginally passed the WHO standard for

follow-up action if deemed necessary. The Chairman suggested further discussing the issue when more water test results was available.

(ii) Proposed Enhancement Measures to Strengthen the Management of Inside Services Including Proposed Leak Detection of Inside Service

7.8 Mr IP Chit Ki of WSD reported that WSD would formulate a new voluntary scheme to cover leak detection of the private underground water pipes. Details of the proposed scheme would be discussed in the forthcoming meeting of the WG on Water Quality. Prof. LO Man Chi, Irene enquired whether leakage detection would be an added requirement for "Quality Water Supply Scheme for Buildings – Fresh Water (Plus)". Mr IP remarked that leak detection would be a separate scheme. Dr. CHING Cheuk Tuen, Regina of DH enquired whether the leakage could be detected by the household or only by professionals. Mr LAM Tin Sing, Enoch of WSD remarked that it was difficult to discover leakage of the underground pipes and deployment of technical staff with leakage detection experience and leakage detection equipment would be required.

7.9 Mr IP Chit Ki stated that prior to implementation of the voluntary scheme on leak detection, pilot trials had been conducted for three public rental housing estates namely Yiu Tung Estate, Lai Yiu Estate and Chak On Estate and all the detected leakage had been rectified. A meeting with the Real Estate Developers Association of Hong Kong (REDA) was held on 22 December 2015 in which a brief introduction of the proposed voluntary scheme was given and meetings with two major private property management companies would be conducted to identify suitable buildings/estates for trials.

WSD

7.10 Mr IP Chit Ki reported that Construction Industry Council (CIC) had been arranging appropriate part-time training course on the skill of leak detection for the stakeholders. In particular, CIC endorsed the draft curriculum for the training course of 21-hour duration and would proceed to seek funding for lecturers, equipment and venue setup and commencing the work for recruitment and construction of venue. Tentatively, the course would commence in the 3rd quarter of 2016.

8. Publication of Water Quality Data

8.1 The Chairman invited Mr KWOK Yau Ting, Kelvin of WSD to report the progress on the publication of water quality data of Dongjiang water

received at Muk Yu Pumping Station (P/S) and drinking water supply in Hong Kong. Mr KWOK reported that the WG on Publication of Water Quality Data had met on 24 November 2015 to endorse the water quality data for the period from 1 October 2014 to 30 September 2015 and the data had been uploaded to WSD's website on 27 November 2015.

- 8.2 Mr KWOK Yau Ting, Kelvin remarked that the quality of both Dongjiang water and drinking water in the said period complied with the national standard set out for Type II waters in the "Environmental Quality Standards for Surface Water" (GB3838-2002) as stipulated in the Dongjiang Water Supply Agreement and the WHO's Guidelines for Drinking-water Quality of 2011 (WHO 2011) respectively.

9. Working Group on Water Resources

- 9.1 The Chairman invited Mr IP Chit Ki of WSD to report the progress on behalf of the Secretary of the WG on Water Resources. Mr IP reported that the consultancy review of the Total Water Management (TWM) strategy was ongoing. Currently the consultants were revising the water demand and supply model, and conducting a domestic water consumption survey. Field work would be completed in March 2016 while the analysis and evaluation of results would be available around May 2016.

WSD

- 9.2 Mr IP Chit Ki further reported that the consultants had submitted draft reports on the 12 topical studies (including reuse of treated sewage effluent, alternative water sources for flushing, alternative water sources for water-cooled air conditioning systems, seawater desalination, use of groundwater, utilization and protection of local water resources, use of water saving devices, publicity and public education, water loss management etc.). The consultants were refining the reports to address comments received from various parties. Meanwhile, the consultants were characterizing and evaluating the options identified in the topical studies for building up the new TWM strategy.

- 9.3 Prof. LO Man Chi, Irene enquired whether the study would conduct population forecast of Hong Kong. Mr LAM Tin Sing, Enoch of WSD stated that the population forecast data was available from Planning Department and Census and Statistics Department and thus the forecast was not included in the TWM review.

9.4 The Chairman enquired whether the review would study the water consumption pattern/habit of Hong Kong people, for instance, drinking of first draw of tap water. Mr LEUNG Chung Lap, Michael of WSD reported that such information had been covered in domestic water consumption survey with sample size of 1000 questionnaires. The survey was still on-going and the current result showed that around 6% - 7% of Hong Kong people had used the first draw of tap water for drinking purpose. The Chairman suggested further discussing the findings of the review upon its completion. WSD

9.5 Dr LAU Wai Neng, Michael suggested WSD to arrange the consultant to present the findings of the TWM review. The Chairman supported the suggestion and would invite the consultant to give the presentation in the WG on Water Resources and if required, in the Advisory Committee meeting. WSD

10. Use of Reclaimed Water

10.1 The Chairman invited Mr IP Chit Ki of WSD to report the progress of the use of reclaimed water. Mr IP reported that WSD had planned to effect reclaimed water supply to the north-eastern part of the New Territories for toilet flushing and other non-potable uses in phases starting with Sheung Shui and Fanling from 2022 onwards. It was anticipated that the supply of reclaimed water would progressively be extended in line with the completion of the developments in the north-eastern part of the New Territories. Dr CHING Cheuk Tuen, Regina of DH enquired whether the non-potable use of reclaimed water would include cooling towers. Mr LAM Tin Sing, Enoch of WSD responded that reclaimed water would not be used in cooling towers.

10.2 Mr IP Chit Ki reported that WSD had also commenced the design of infrastructure and were carrying out a consultancy study on developing charging and legal framework for the supply of reclaimed water. The study was expected to be completed later this year.

10.3 The Chairman enquired whether the price for reclaimed water would be lower than fresh water for flushing. Mr LEUNG Chung Lap, Michael of WSD responded that the temporary fresh water had been using for toilet

flushing with charge in the north-eastern part of the New Territories currently. Supplying reclaimed water to Sheung Shui and Fanling would be cheaper than supplying fresh water. Such difference would be taken into account in developing the charging scheme for reclaimed water for toilet flushing.

11. Development of the Desalination Plant at Tseung Kwan O

11.1 The Chairman invited Mr LAM Shing Tim of WSD to update the Members on the Tseung Kwan O desalination plant project. Mr LAM reported that the feasibility study for the construction of a desalination plant in Tseung Kwan O had been completed in 2015. WSD obtained approval from the Environmental Protection Department (EPD) for the Environmental Impact Assessment report and EPD issued an environmental permit for the project. A consultancy agreement commenced in November 2015 for the investigation review, design and construction of the first stage of the proposed desalination plant at Tseung Kwan O with an output capacity of 135 million litres per day. The consultants commenced the design work for the proposed plant for completion in about 2017.

11.2 Mr LAM Shing Tim added that WSD had launched a project website in end February 2016 to provide the public with updated information about the desalination plant project (An icon for linking to the project website is available in WSD homepage). WSD launched a market sounding exercise in end February 2016 to invite prospective bidders to illustrate their experiences and capabilities, respond to a set of market sounding questions and share views on the project.

11.3 The Chairman enquired whether the procurement strategy of the project would be in the form of a design and built or design, built and operation contract. Mr LAM Tin Sing, Enoch of WSD responded that the procurement strategy was still under review.

11.4 Mr LAM Shing Tim recapitulated the note of previous ACRQWS Meeting No. 6 concerning the utilization of water in the stratum below the seabed for desalination that the issue would be further studied during the next stage of the desalination plant. The preliminary results showed that, due to low permeability of the stratum below the seabed near Tseung Kwan O Area 137, the above utilization would not be favourable. The option would also

impose adverse effects on the ocean ecology.

12. The Hong Kong Voluntary Water Efficiency Labelling Scheme (WELS)

12.1 The Chairman invited Mr IP Chit Ki of WSD to report the progress of the implementation of the Water Efficiency Labelling Scheme (WELS). Mr IP reported that 210 nos. showers for bathing, 167 nos. water taps, 423 nos. washing machines, 31 nos. urinal equipment and 26 nos. flow controllers had been registered under WELS as at end February 2016.

13. Mandatory Use of WELS Products

13.1 Mr IP Chit Ki of WSD also reported the progress on the mandatory use of WELS products. Since 2009, WSD had developed a voluntary WELS covering different types of plumbing fixtures and water-consuming appliances. In view of the voluntary nature, the participation rate and the penetration rate in WELS were low despite various promotional efforts. To step up the gear in water conservation, the use of the WELS products should be further promoted by mandating the scheme.

13.2 Mr IP Chit Ki reported that WSD had proposed to implement the Mandatory Use of WELS Scheme in two stages as follows:-

Stage 1 – Mandating the use of designated WELS products of showers for bathing, water taps and urinal equipment for new buildings and buildings under major renovation which would be launched in late 2016 tentatively with one year grace period.

Stage 2 – Mandating WELS through legislative amendments which would be launched in 2021 tentatively.

13.3 Mr IP Chit Ki reported that Economic Analysis and Business Facilitation Unit had completed a Business Compliance Cost review to assess the compliance and administrative burden in complying with the specified requirements under WELS. In addition, a Business Impact Assessment would commence in early April 2016 to assess the difficulties of the relevant stakeholders in complying with the above Stage 1 mandatory requirements.

13.4 Dr. LAU Wai Neng, Michael suggested that the government should take the lead to use WELS device in all public rental housings and premises. Mr. IP

Chit Ki expressed that WSD would follow up with other government departments. Dr. CHING Cheuk Tuen, Regina of DH further enquired the control measures over the replacement of WELS products by non-WELS products after its first installation. Mr LAM Tin Sing, Enoch of WSD expressed that introduction of mandatory use of WELS products would be implemented as administration measure in Stage 1 and upon implementation of Stage 2, only WELS products would be available in the market for sale after legislative amendment. Prof. LO Man Chi, Irene shared her experience in installation of WELS showers on bathing in Hong Kong University of Science and Technology dormitory for 3 months which had achieved a reduction of 20-30% of water consumption during the period and highly recommended the Members to use WELS products.

14. Water Conservation Campaign for Primary Schools

14.1 The Chairman invited Mr WONG Man Kei, David of WSD to report on various activities in relation to water conservation campaign. Mr WONG reported that 69 roadshows had been conducted in primary schools from 1 September 2014 to 31 July 2015. Certificate Presentation Ceremony for Water Conservation Ambassador 2014/15 had been held on 10 July 2015. More than 40 schools joined the Scheme and over 500 primary students were appointed as Water Conservation Ambassadors.

14.2 Mr WONG Man Kei, David also reported that the meeting of WG on Public Education had been held on 15 January 2016 and major Public Education activities arranged in 2015/16 were as follows-

- (i) Commemoration Ceremony of the 50th Anniversary of Dongjiang Water Supply to Hong Kong on 28 May 2015 and roving exhibitions from June to Sept 2015;
- (ii) Ngau Tam Mei Water Treatment Works Open Day on 24 October 2015;
- (iii) Production and distribution of various leaflets to promote drinking water safety advice ó òMake smart choices of pipes and fittings, Connect copper pipes with compliant solderö, öTips for using wall-mounted dispensersö and öLead in drinking water ó water use tipsö;
- (iv) Water Treatment Works Open Day ;and
- (v) Water Forum 2016 with the theme öWater Security : From Dongjiang

to Sponge Cityö co-organised with Friends of the Earth.

15. Integrated Education Programme (IEP) on Water Conservation

15.1 The Chairman invited Mr CATLIN Kit Wai, Stephen of WSD to report on the status of the öCherish Water Campusö Integrated Education Programme (IEP) on Water Conservation (「惜水學堂」教育計劃). Mr CATLIN reported the progress as follows-

- (i) Over 170 primary schools had joined the IEP;
- (ii) The teaching kit had been distributed to all primary schools in Hong Kong; and
- (iii) The pledging ceremony of IEP had held on 23 January 2016 at the Hong Kong Polytechnic University, in which over 300 primary school principals, teachers and students had raised cards together to create an enormous collage of öCherish Water Campusö and made a mass pledge to cultivate a water conservation culture amongst the new generation starting from öCherish Water Campusö (「從惜水新學堂做起 協力培育 NEW GEN 節水文化」).

15.2 Mr CATLIN Kit Wai, Stephen remarked that he would follow up previous enquiry of Dr. CHING Cheuk Tuen, Regina of DH regarding the renewed version of hand washing leaflet that had yet sent to her office. WSD

16. Initiative of Installing Flow Controllers at Private Housing Estates

16.1 The Chairman invited Mr CATLIN Kit Wai, Stephen of WSD to report on the progress of the WG on Water Resources on the implementation of the initiative of installing flow controllers at private housing estates. Mr CATLIN reported that WSD had partnered up with four property management companies, namely Kerry, Urban, City Base and Nan Fung, to install flow controllers supplied by WSD in their residential estate clubhouses. A total of 863 flow controllers (195 showers and 668 taps) had been installed in 52 clubhouses managed by the four property management companies.

16.2 Mr CATLIN Kit Wai, Stephen also advised 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 were installed with flow controllers at their water taps and/or showerheads.

16.3 Mr CATLIN Kit Wai, Stephen reported that analysis for households with flow controllers installed in the 16 estates indicated an average saving of around 15 litres per household per day, corresponding to a reduction of about 5 litres per capita per day based on an average household size of 2.9. The Members remarked that this was a good result.

16.4 Mr CATLIN Kit Wai, Stephen also stated that WSD had been continuing to install flow controllers in other public rental housing estates. As at February 2016, flow controllers had been installed in a further 24,300 households in another 14 estates.

16.5 Dr LAU Wai Neng, Michael enquired about the survey results regarding the feelings after installation of flow controllers in private estate. Mr CATLIN Kit Wai, Stephen expressed that the response rate on the survey was low. Among the returned questionnaires, more than 80% expressed that the free distribution of flow controller could enhance the residents' sense of water conservation.

17. **Other Major Water Conservation Activities by WSD**

17.1 The Chairman invited Mr CATLIN Kit Wai, Stephen of WSD to update the Members on the development of Best Practice Guidelines (BPG) and the Water Conservation Week (WCW). Mr CATLIN reported that WSD had installed over 33,400 flow controllers in government buildings and schools and the installation works would continue.

WSD

17.2 Mr CATLIN Kit Wai, Stephen reported the progress on the catering and hotel BPG questionnaire surveys. For catering industry, 13,754 questionnaires were sent out and 232 returned, i.e. 1.7% return rate and the results showed that about 89% would consider implementing the general operation best practices and about 45% implemented some best practices already. The survey results were presented to the Institute of Dining Art. The presentation to the other 3 major catering trade associations was being arranged and the BPG for the catering industry was expected to be finalized by mid 2016. Mr YEUNG Wai Sing commented that the industry welcomed the launch of BPG and actively considered implementing the practices in BPG.

WSD

- 17.3 Mr CATLIN Kit Wai, Stephen reported that for hotel industry, 226 questionnaires had been sent out and 18 had been returned, i.e. 8.4% return rate and the analysis was still in progress. The consultation with the hotel trade associations was expected to take place in mid 2016. WSD
- 17.4 Regarding WCW, Mr CATLIN Kit Wai, Stephen reported that in view of the lead-in-water incident, the event had been deferred and re-scheduled to take place on 17-21 November 2016 with the venue the Hong Kong Polytechnic University would remain unchanged. Preparation for WCW was re-activated and the 3rd Organising Committee (OC) meeting would be convened in early May 2016. WSD
- 18. Visit to Guangdong in 2015**
- 18.1 The Chairman invited Mr IP Chit Ki of WSD to report the visit to Guangdong. Mr IP reported that the annual visit to Guangdong had been held on 8-9 December 2015. The delegation of the ACRQWS comprised 6 non-official members, 3 official members and 5 other HKSAR Government officials.
- 18.2 Mr IP Chit Ki reported that the delegation had visited the Xiacun Section of the Dongjiang (東江蝦村段) and Boluo Domestic Sewage Treatment Plant (博羅縣城生活污水處理廠) at Huizhou (惠州), Taiyuan Pumping Station (太園泵站) and Dongshen Water Supply Improvement Works Exhibition Centre (東深供水改造工程展覽館) at Dongguan (東莞), the Shawan River Sewage Interception Works (沙灣河污水截排工程), the Bio-nitrification Plant (生物硝化站) located at the inlet of Shenzhen Reservoir (深圳水庫) and the Safety Monitoring and Control Centre of Guangdong Yue Gang Water Supply Co Ltd (粵港供水公司安全監控中心) at Shenzhen (深圳).
- 18.3 Mr IP Chit Ki added that upon returning to Hong Kong in the afternoon at the end of the visit, a press conference had been held at the Headquarters of WSD. The press conference was chaired by the Chairman and attended by 5 members, namely Dr. CHEUNG Yun Hing, Richard, Dr. LAU Wai Neng, Michael, Dr. WONG Siu Wing, Eric, Mr LAU Yuet Fan, Ivan and Ms TONG Po Chun. They briefed the press on their observations on the water quality of Dongjiang during the 2-day visit. They advised that the water quality of Dongjiang had been satisfactory. A short video highlighting various parts of the visit was also shown in the press conference.

18.4 The Chairman expressed that he had conveyed to the Guangdong Officials the concern of the Advisory Committee on the quality of water in Shenzhen Reservoir during overflow of Shawan River in the event of heavy rainfall. The Chairman added that the Guangdong Officials had shared same concern and had remarked that they had been minimizing the impact of overflow of Shawan River on the quality of water in Shenzhen Reservoir during heavy rainfall.

18.5 Mr IP Chit Ki advised that the coming visit would be held in late 2016 and WSD would propose the details of the visit for the Members' consideration in due course. The Chairman commented that the visit could be arranged for 2 to 3 days with the view to visiting more locations of interest and to suit most of the Members' availability. Mr IP would follow up with the proposal.

WSD

Any Other Business

19. Evaporation from Reservoirs of Hong Kong

19.1 Mr LAM Tin Sing, Enoch of WSD stated that the Green Power currently published a study stating that the evaporation of Hong Kong reservoirs was about 30 million cubic metre per year. Mr. LAM reported that WSD was aware of the situation and WSD had planned to implement two pilot floating Photovoltaic (PV) systems at Shek Pik and Plover Cove Reservoirs to reduce reservoir evaporation, harvest solar energy and suppress algae growth. The pilot project at the Shek Pik Reservoir would cover an area of about 1,400 m² for completion by the end of 2016 whereas the one at Plover Cove Reservoir would be completed in 2017.

WSD

19.2 The Chairman invited Dr. LAU Wai Neng, Michael to give his views regarding the effect of installation of the floating PV system on the biodiversity in the reservoirs. Dr. LAU expressed that in general there was larger biodiversity near the shores of waterbodies and the pilot projects at the two reservoirs would be useful to evaluate the impact on water cycle and effect on phosphorus and nitrogen contents with the reservoirs to be covered by PV systems.

20 There being no further items raised, the Chairman thanked the Members for

attending the meeting and adjourned the meeting at 5:10 p.m.