

Advisory Committee on Water Supplies
Minutes of Meeting No. 5

Date: 25 October 2017 (Wednesday)

Time: 2:00 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
Prof KWAN Kai Cho, Joseph	Task Group Chairman
Sr WONG Bay	Working Group Vice-Chairman
Mr TAM Kwok Wing, Ivan	Task Group Vice-Chairman
Dr WONG Siu Wing, Eric	Member
Dr WONG TAAM Chi Woon, Vivian	Member
Mr CHAN Kwok Wai	Member
Ms LAM Yuk Chun	Member
Ms TONG Po Chun	Member
Ms WONG Pik Kiu	Member
Mr VY Ek Chin	Member's Representative (Development Bureau)
Mr TSUI Wai	Member's 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's representative (Housing Department)
Mr IP Chit Ki	Secretary (Water Supplies Department)

Water Supplies Department Representatives in Attendance

Mr CHAU Sai Wai	Assistant Director, Water Supplies Department
Mr CHUNG Siu Wing, Joseph	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 TSANG Chung Man, Alex	Senior Engineer, Water Supplies Department
Ms HO Chui Hang, Edith	Senior Engineer (Ag), Water Supplies Department

Mr YU Man Tat
Mr LEE Hon Lin, Kevin

Senior Chemist, Water Supplies Department
Engineer, Water Supplies Department

Absent with Apologies

Prof CHAN Yan Keung, Thomas	Member
Prof CHIU Pauline	Member
Prof LI Xiao Yan	Member
Dr LAU Wai Neng, Michael	Member
Dr LEE Ka Yan, David	Member
Mr LAU Yuet Fan, Ivan	Member
Ms KWAN Sau Ling	Member
Mr YEUNG Wai Sing	Member

Item

Opening Remarks

- 1.1 The Chairman welcomed all the Members to the Advisory Committee on Water Supplies (ACWS) Meeting No. 5.
- 1.2 The Chairman informed the meeting that Prof CHAN Thomas, Prof CHIU Pauline, Prof LI Xiao Yan, Dr LAU Michael, Dr LEE David, Mr LAU Ivan, Ms KWAN Sau Ling, and Mr YUENG Wai Sing had sent in their apology for not being able to attend the meeting.

Agenda Items

Confirmation of Minutes of Last Meeting (ACWS Meeting No. 4)

- 2.1 The Chairman remarked that the revised draft minutes of the meeting no. 4 (which had consolidated comments from Members) had been circulated to the Members on 3 October 2017 and no further comment was received before the meeting. There being no further amendment proposed at the meeting, the revised draft minutes of the Meeting No. 4 sent to Members on 3 October 2017 were confirmed.

Matters Arising

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

3.1 The Chairman invited Dr MAN Chi Sum, Chairman of the Working Group (WG) on Water Conservation, to update Members on the Integrated Education Programme (IEP) 「惜水學堂」教育計劃 on Water Conservation.

3.2 Dr MAN reported the following:

- Over 230 primary schools had joined the IEP.
- The 2016/17 IEP Award Ceremony would take place in the afternoon of Friday 10 November 2017 at Domain Mall in Yau Tong. A total of 196 awards would be presented to school sponsoring bodies, schools, principals, teachers and students. WSD
- A Working Group on the pilot education scheme for kindergartens had been set up comprising representatives from school sponsoring bodies and kindergarten principals. The first working group meeting had been held on 14 July 2017 in which the implementation of the pilot scheme and the associated education kit had been discussed. Thereafter, the education kit had been finalised and production completed. The pilot scheme had been subsequently launched at the start of the 2017/18 school year as planned with the education kit delivered to the 82 participating kindergartens/nursery schools in September 2017. Two sessions of teacher training workshop would be conducted, one on 27 October 2017 WSD and the other on 11 November 2017.

4. “Save Water” Competitions for Hotel and Catering Trades

4.1 The Chairman invited Dr MAN Chi Sum, Chairman of WG on Water Conservation, to update Members on “Save Water” Competitions for Hotel and Catering Trades.

4.2 Dr MAN reported the following:

- Instead of a “Save Water” competition, WSD was proposing to collaborate with the catering associations to organise a charter/ recognition scheme for restaurants which could demonstrate their support and commitment to implement the Best Practice Guidelines (BPG) for Water Usage in Catering Industry. In that respect, WSD had drawn up a framework, making reference to the Food Wise Eateries Scheme (咪嚟嘢食店計劃).

Restaurants participating in the scheme would be awarded charter certificates and those who had implemented BPG in their operations would be granted the recognition as a water saver restaurant. Members of WG on Water Conservation were of the general view that it would be worth pursuing the scheme but it was necessary to consider way to incentivise the restaurants to participate in the scheme.

- Members of WG on Water Conservation also considered if the charter/recognition scheme could be successfully implemented in the catering industry, it should be extended to the hotel industry.

WSD

5. Green Group Collaboration

- 5.1 The Chairman invited Dr MAN Chi Sum, Chairman of WG on Water Conservation, to update Members on the green group collaboration.
- 5.2 Dr MAN reported that WSD had co-organised, supported or participated in a total of 14 events/activities organised by green groups and NGOs so far this year.
- 5.3 Dr MAN reported that flow controller installation works were being arranged for 7 primary schools participating in World Wide Fund (WWF) for Nature Hong Kong's "Water Saver School", for which WSD was the co-organiser. Water Saver School was a programme to engage students of tertiary institution (totalling around 30), provide water conservation workshops for them and arrange them to assist in conducting water conservation activities in primary schools. The collaboration between WWF and WSD on Water Saver School was initiated from the first tea gathering with the green groups.
- 5.4 Dr MAN mentioned that the third tea gathering with the green groups had been held on 16 October 2017 together with a site visit to Tong Fuk catchwater where a pilot trial had been arranged in collaboration with Green Power and Kadooire Farm for release of part of the rainwater collected in the catchwater to promote an eco-environment for the downstream rivers. This pilot trial was initiated from the second tea gathering with the green groups.
- 5.5 Dr MAN stated that at the third tea gathering with the green groups, Kadoori Farm had delivered a presentation on "Hong Kong's Stream Ecosystem". WSD had also presented an overview of "Floating Solar Power System

Photography Competition”. In addition, WSD’s consultant, Leigh & Orange had consulted the green groups representatives on the exhibit design for the Tin Shui Wai Water Resources Education Centre (WREC). There were suggestions for exhibits to cover virtual water/ water footprint and to enable a public understanding of the processes on the water from the source at Dongjiang up to consumers’ taps.

6. Initiative of Installing Flow Controllers at Housing Estates

- 6.1 The Chairman invited Dr MAN Chi Sum, Chairman of WG on Water Conservation, to update Members on the initiative of installing flow controllers at housing estates.
- 6.2 Dr MAN stated that WSD had published a leaflet on “Water Use Tips” in July 2017, which advised that the water tap’s strainer or flow controller should be regularly cleaned to remove accumulated particular/debris.
- 6.3 Dr MAN also reported that WSD had issued an email blast to all 454 District Council (DC) Members on 6 October 2017, seeking their assistance in distributing flow controllers to households under the “Let’s Save 10L Water” campaign by making group applications on behalf of households in their constituencies to WSD. In the email, WSD indicated that upon receipt of DC Members’ group applications, arrangement would be made for delivering flow controllers directly to their offices and where necessary, demonstration of installing flow controllers onto taps could be given to them. Acceptance of submission of group applications would last until 31 March 2018.

7. Permanent Water Resources Education Centre at Tin Shui Wai

- 7.1 The Chairman invited Dr MAN Chi Sum, Chairman of WG on Water Conservation, to update Members on the design of Permanent Water Resources Education Centre at Tin Shui Wai.
- 7.2 Dr MAN reported that the floating PV panels at Shek Pik and Plover Cover Reservoirs would be featured in the “renewable energy” section of the permanent WREC’s exhibition. On the other hand, the consultant was directed to fully take on board Members’ comment on the need for interactive

elements of exhibits as well as ergonomical design to suit target groups of different ages. The exhibit design was due for completion by the end of October 2017. Tenders would then be invited to engage contractors to carry out the fabrication works, which was planned for completion by early 2019. WSD

8. Total Water Management Strategy (2.0)

- 8.1 The Chairman invited Prof CHENG Man Chung, Daniel, Chairman of WG on Water Resources, to update the Members on the views of the WG on the Total Water Management (TWM) Strategy (2.0) being formulated.
- 8.2 Prof Daniel CHENG reported that Black & Veatch Hong Kong Limited (the consultant undertaking the TWM Review) had recommended measures, such as establishment of an intelligent network management system to monitor the health and conditions of the water mains in each District Metering Area, extending the scale of implementation of automatic meter reading and installation of master meters, to reduce water loss in WSD distribution system and inside services. These measures which were being implemented/considered by WSD could help prevent water main bursts and identify leaks. WSD
- 8.3 Prof Daniel CHENG stated that the comments of ACWS Members would be taken into account in refining the TWM strategy. WSD

9. Working Group on Water Quality

- 9.1 The Chairman invited Prof WONG Wing Tak, Chairman of WG on Water Quality, to report the key issues from the fifth WG meeting which had been held on 25 September 2017.

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

- 9.2 Prof WONG reported the following:
- As at 17 October 2017, 1 010 applications to the “Quality Water Supply Scheme for Buildings – Fresh Water (Plus)” (the “Q-Plus”) had been received, of which 944 were approved with certificates awarded. 59 applications were being processed whilst 7 applications required additional information and clarifications.
 - A total of about 364 000 private households were covered by the successful applications.

- The proposed details of the new scheme “Quality Water Supply Scheme for Buildings – Fresh Water (Management System)” (“QMS”) to combine Q-Plus with Water Safety Plan for Buildings (WSPB) were discussed and supported by the Working Group.

Presence of Microplastics in Drinking Water

- 9.3 Prof WONG advised that currently there was neither guideline value nor monitoring requirement on microplastics in WHO’s Guidelines and WSD should keep in view the latest development of the Guidelines.

Action Plan for Enhancing Drinking Water Safety

- 9.4 Prof WONG reported the following:
- The Action Plan for Enhancing Drinking Water Safety (提升香港食水安全行動計劃) had been announced by the Development Bureau and WSD on 21 September 2017.
 - The Action Plan consisted of 5 components, namely (1) Drinking Water Standards and Enhanced Water Quality Monitoring Programme (食水標準及水質監測優化計劃); (2) Plumbing Material Control and Commissioning Requirements for New Plumbing Installations (水喉物料監管及新建水喉裝置驗收規定); (3) Water Safety Plans (水安全計劃); (4) Water Safety Regulatory Regime (食水安全規管制度); and (5) Publicity and Public Education (宣傳及公眾教育)。

10. Working Group on Water Resources

- 10.1 The Chairman invited Prof CHENG Man Chung, Daniel, the Chairman of WG on Water Resources to report the key issues from the fourth WG meeting which had been held on 13 October 2017.

Tseung Kwan O Desalination Plant

- 10.2 Prof Daniel CHENG reported that WSD had presented the latest development of the Tseung Kwan O desalination plant project. Members suggested that WSD could make use of the desalination plant project for water conservation education by demonstrating the complexed desalination process to the public. WSD reported that provision of educational facilities to educate the public on the desalination process would be one of the contract requirements of the desalination plant project. In addition, WSD would incorporate contract provision to encourage the contractor to use renewable energy such as solar

energy and nearby landfill gas in the desalination plant. Members appreciated WSD's effort in bringing in the use of renewable energy in the plant design. Members also noted that it would be one of the contract requirements for WSD staff to take part in the operation team of the desalination plant. This could provide a good opportunity for WSD staff to gain the experience on the operation of a desalination plant.

- 10.3 Dr Man strongly suggested an education centre be provided in the desalination plant. The Chairman also suggested WSD to make use of the education WSD centre to introduce to the public the whole desalination process.

Automatic Meter Reading

- 10.4 Prof Daniel CHENG reported that WSD had presented the latest development on the Automatic Meter Reading in WSD. Members agreed that the new technology in meter reading could help reduce water loss as well as to promote the public awareness on water conservation. Members also suggested different ways to WSD to conduct research and development (R&D), such as to engage the academia, "Start-up" companies or local manufacturers to participate in the R&D. WSD reported that a steering committee on R&D chaired by the Deputy Director of Water Supplies had been set up to explore and promote R&D collaboration with academia. Members supported the direction of R&D in WSD.

Water Loss Control in Private Developments

- 10.5 Prof Daniel CHENG reported that WSD had presented the work on water loss control in two private developments. With a significant effect on the reduction in the overall water loss, Members fully supported the work of WSD on water loss control in inside service. Considering the intensive resources required for tackling every single case, Members suggested collaboration with private parties. Members also remarked that with a view to conserving water, the work on water loss control should be continued in conjunction with WSD promotion of water conservation and the establishment of water intelligent network (WIN).

11. Working Group on Water Conservation

- 11.1 The Chairman invited Dr MAN Chi Sum, Chairman of WG on Water

Conservation to summarize the discussions at the fifth WG meeting which had been held on 9 October 2017.

Best Practice Guidelines for Water Usage in Industries

11.2 Dr MAN reported the following:

Catering

- WSD had conducted a questionnaire survey in the third quarter this year in collaboration with the four catering services associations to gauge restaurants' view on the BPG for Water Usage in Catering Industry, in particular, the usefulness and effectiveness of the recommended measures in helping them to save water.
- So far, there was no return of the questionnaire, which might be due to the questionnaire being lengthy and there was no incentive (such as a recognition certificate as a gift) to the restaurant operators for completing and returning questionnaires.

Hotel

- WSD had plans to organise talks for hotel frontline staff to promote BPG for Water Usage in Hotel Industry. WSD

Laundry

- The consultant was currently addressing WSD's comment on the draft BPG for Water Usage in Laundry Industry. The consultant had submitted a revised questionnaire for collecting opinions of laundry companies on the draft guidelines for WSD's further comment. WSD

Roving Exhibition

11.3 Dr MAN reported that Roving Exhibition for all 18 DC districts, aiming at outreaching to the community to enhance communication with the public and to raise awareness of water conservation, had commenced in August 2017. The status of the Roving Exhibition up to November 2017 was as follows;

District	Date	Venue
Kwun Tong (L)	24/8 – 31/8 (completed)	Domain Mall (G/F, Atrium), Yau Tong
Wanchai (S)	15/9 – 28/9 (completed)	Wan Chai Immigration Tower (1/F)
Sai Kung (S)	25/10 – 31/10 (in progress)	Hang Hau Community Hall (G/F, Lobby)
Eastern (L)	2/11 – 5/11 (upcoming)	Island Resort Mall (G/F, Aqua Theatre), Chai Wan

S – Small-scale

L – Large-scale

- 11.4 Dr MAN also reported that starting from the third round of Roving Exhibition, details of the “Enhanced Water Quality Monitoring Programme” and health information about lead and five other metals in drinking water (provided by the Department of Health) would be displayed as part of the exhibition. WSD

Promotion to Foreign Domestic Helpers

- 11.5 Dr MAN mentioned that home water saving tips provided in the Roving Exhibition had also been prepared in Indonesian, Talong and Thai, apart from Chinese and English, so as to enable foreign domestic helpers to learn about them more easily.
- 11.6 Dr MAN then stated that a video production service provider had been engaged to produce videos aiming at promoting conscientiousness about water use in housework to both domestic helpers and their employers. Preparation for the videos production (scriptwriting and storyboards) was underway. WSD

12. Task Group on Water Safety in Buildings

- 12.1 The Chairman invited Prof KWAN Kai Cho, Joseph, the Chairman of Task Group (TG) on Water Safety in Building, to summarize the discussions at the third meeting of the TG which had been held on 15 September 2017.

Pilot Trials of WSP for Buildings (WSPB)

- 12.2 Prof Joseph KWAN reported that the pilot trials of WSPB at a private residential building and two schools (one primary school and one secondary school) had been completed in May and August 2017 respectively whilst another pilot trial at an elderly home was in progress. The trial results were in general satisfactory and the findings had been incorporated in the WSPB guidelines and templates. In addition to the on-going promotions, the Housing Department identified 3 public residential buildings for pilot trials of WSPB. WSD

Launching of WSPB

- 12.3 Prof Joseph KWAN reported that WSPB had been launched on 21 September 2017 as part of the Action Plan. The Guidelines for WSPB and templates for general buildings and schools had been uploaded to WSD’s website. Training/workshops had been organized for Licensed Plumbers, Building Surveyors and Building Services Engineers to equip them as Qualified Persons to provide assistance to building owners and management agents in the formulation of WSP for their buildings. A list of Qualified Persons who

completed WSPB training/workshops was uploaded to WSD's website and more WSD WSPB training and workshops would be organized. WSD would also continue to organize seminars, forums and briefing sessions for the public, building management and schools to promote WSPB. A WSPB Helpdesk was established to provide technical support to building owners and management agents on WSPB.

Quality Water Supply Scheme for Buildings-Fresh Water (Management System) ("QMS")

- 12.4 Prof Joseph KWAN also reported that the proposed scheme of QMS had been endorsed by ACWS on 13 October 2017 for launching. WSD

13. Action Plan for Enhancing Drinking Water Safety

- 13.1 The Chairman invited Mr KWOK Yau Ting, Kelvin of WSD to present the Action Plan for Enhancing Drinking Water Safety. The Chairman stated that all Members in ACWS fully supported the launch of the Action Plan.
- 13.2 The Chairman stated that Development Bureau (DevB) would establish a Drinking Water Safety Advisory Committee (DWSAC) to advise Secretary for Development on the aspects including the regulatory regime and standards for drinking water safety in Hong Kong. The Chairman stated that taking into account the terms of reference of DWSAC, the terms of reference of the WG on Water Quality of ACWS would be reviewed. WSD
- 13.3 Mr TSUI Wai of Development Bureau stated that the DWSAC would be established in the end of 2017 and would focus on drinking water safety in Hong Kong while ACWS could continue to advise on matters related to water supplies including the Dongjiang water, water resources and water conservation etc.

14. Update on Water Consumption Target

- 14.1 The Chairman invited Mr LEUNG Chin Hung and Mr CHENG Chun Wai of WSD to present an update on Water Consumption Target which was to reduce the per capita fresh water consumption by 10% by 2030 the earliest with 2016 as the base year.
- 14.2 Ms WONG Pik Kiu remarked that the information of qualified leak detection

companies was not readily available. Mr Enoch LAM responded that the list of companies which had provided leak detection service to WSD was available on WSD's website. Prof CHENG Man Chung, Daniel stated that WSD should encourage more people to join the water mains maintenance and repair industry. Mr Enoch LAM responded that Construction Industry Council (CIC) had arranged various courses on waterworks and would enhance the promotions to encourage young people to join the waterworks industry.

14.3 Dr WONG Siu Wing, Eric enquired whether noise-leak correlation technique had been adopted by WSD in leak detection. Mr CHENG of WSD confirmed that WSD had used such technique.

14.4 Mr FORK Ping Lam of FEHD suggested WSD to enforce the Waterworks Ordinance to require the private owner to fix the water leakage under his/her ambit if the "step test" result indicated water loss. Mr Enoch LAM advised that WSD had stepped up actions including enforcement action to reduce water loss in inside service and was formulating long term strategy for monitoring and charging water loss in communal service. Mr Enoch LAM also encouraged FEHD to provide WSD with information or cases on leakage or suspected leakage of inside service found during their routine inspection.

15. Report on Visit to PV Panel at Shek Pik Reservoir

15.1 The Chairman invited Mr IP Chit Ki of WSD to report on the visit to PV Panel at Shek Pik Reservoir held on 10 October 2017.

15.2 The Chairman enquired WSD about any complaints from the public especially the hikers on the visual impact of the floating PV panels in Shek Pik. Mr TSANG Chung Man, Alex of WSD confirmed that there was no such complaint received so far.

15.3 Dr MAN Chi Sum suggested WSD to engage the hikers so that they would have good first impression on the pilot project before large scale implementation in Hong Kong. Mr Alex TSANG responded that WSD was currently engaging the hiking associations by organising site visits and photo competition.

16. Proposed Visit to DJ Water Supply System

16.1 The Chairman invited Mr IP Chit Ki of WSD to present the proposed visit to DJ

Water Supply System during 21 to 22 November 2017.

17. Proposed Visit to Lung Yat Estate and Holiday Inn Express Soho

- 17.1 The Chairman invited Mr IP Chit Ki of WSD to present the proposed visit to Lung Yat Estate and Holiday Inn Express Soho on 19 January 2018 which had implemented water conservation initiatives.
- 17.2 The Chairman welcomed the visit and encouraged all ACWS Members to join the visit.

18. Any Other Business

- 18.1 The Chairman proposed and all ACWS Members agreed a vote of thanks to Mr Enoch LAM for his contribution to ACWS in the past 4 years.
- 18.2 There being no further items raised, the Chairman thanked Members for attending the meeting and adjourned the meeting at 6:00 p.m.