

Advisory Committee on Water Resources and Quality of Water Supplies
Minutes of Meeting No. 3

Date: 21 June 2013 (Friday)

Time: 9:15 a.m.

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

Present

Dr CHAN Hon Fai	Chairman
Mr MA Lee Tak	Vice-Chairman (Water Supplies Department)
Dr CHEUNG Yun Hing, Richard	Member
Mr LAU Yuet Fan, Ivan	Member
Dr MAN Chi Sum	Member
Mr POON Lock Kee, Rocky	Member
Dr SHIN Kam Shing, Paul	Member
Ms WONG Wai Lan, Luciana	Member
Prof CHAU Kwai Cheong	Member
Ms SO Yee Ching, Phyllis	Member
Mr WONG Siu Wai, Kenny	Member
Mr CHENG Man Chung, Daniel	Member
Ms MOK Ka Han, Rosanda	Member
Ms SIU Ka Yi	Member
Mr CHAN Pai Ming, Jimmy	Member (Development Bureau)
Mr TANG Kin Fai	Member (Environmental Protection Department)
Mr SIN Kwok Hau	Member (Food and Environmental Hygiene Department)
Dr CHING Cheuk Tuen, Regina	Member (Department of Health)
Mr WONG Kwok Fai, Alfred	Secretary (Water Supplies Department)

Water Supplies Department Representatives in Attendance

Mr NG Mang Tung, Bobby	Deputy Director, Water Supplies Department
Mr CHIN Chu Sum	Assistant Director, Water Supplies Department
Mr CHAN Kin Man	Chief Chemist, Water Supplies Department
Mr LAM Ching Man	Chief Engineer, Water Supplies Department
Mr PANG Kwok Fan, Gabriel	Senior Engineer, Water Supplies Department
Mr CHAN Shu Key, Charles	Senior Engineer, Water Supplies Department
Mr KWOK Wing Cheong	Senior Engineer, Water Supplies Department
Mr WONG Man Kei, David	Senior Engineer (Ag), Water Supplies Department
Mr FONG Kai Leung	Engineer, Water Supplies Department (Notes Taker)

Absent with Apologies

Ms WONG Pik Yan, Nicole	Member
Ms TONG Po Chun	Member
Prof CHAN Lung Sang	Member
Dr LEE Ka Yan, David	Member
Mr CHAN Kwok Wai	Member
Ms LAU Kwai Yung	Member
Mr CHAN Siu Tack	Member (Housing Department)

Item

Opening Remarks

- 1.1 The Chairman welcomed all Members to the Advisory Committee on Water Resources and Quality of Water Supplies (ACRQWS) Meeting No. 3.
- 1.2 The Chairman informed the meeting that Ms WONG Pik Yan, Nicole, Ms TONG Po Chun, Prof CHAN Lung Sang, Mr CHAN Kwok Wai and Ms LAU Kwai Yung had sent in their apology for not being able to attend the meeting. Dr LEE Ka Yan, David and Mr CHAN Siu Tack were also not able to come for the meeting due to other urgent commitments.
- 1.3 The Chairman also informed the meeting that Mr SIN Kwok Hau and Dr CHING Cheuk Tuen, Regina had replaced Ms CHU Lan Ying and Dr LEUNG Ting Hung as the representatives of Food and Environmental Hygiene Department (FEHD) and Department of Health (DH) respectively. In addition, Ms AU Wing Tsz, Michelle had resigned from the membership and Mr CHENG Man Chung, Daniel had been appointed to join the Committee for the current term (i.e. 2012-14). The Chairman expressed special thanks to the 3 ex-ACRQWS Members for their contribution in the past and welcomed Mr SIN, Dr CHING and Mr CHENG for attending the meeting for the first time.
- 1.4 The Chairman extended his welcome to the representatives of Water Supplies Department (WSD) for attending the meeting, in particular Mr NG Mang Tung, Bobby who is the successor to the ex-Deputy Director of Water Supplies, Mr CHAN Kwong Wei since his retirement in end October 2012. The Chairman expressed special thanks to Mr CHAN for his contribution in the past. The Chairman also advised that Mr CHIN Chu Sum had replaced Mr NG Mang Tung, Bobby as the Assistant Director/Development of WSD and Mr WONG Man Kei, David and Mr PANG Kwok Fan, Gabriel had taken up the secretaries of the Working Groups (WGs) on Public Education and Water Resources respectively.

Agenda Items

Confirmation of the Minutes of the 2nd Meeting held on 16 August 2012

- 2.1 The Secretary reported that the draft minutes of the 2nd Meeting had been circulated to Members and no 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 2nd Meeting were confirmed.

Matters Arising

3 Public Lectures held in Hong Kong Science Museum

- 3.1 The Chairman invited Mr WONG Kwok Fai, Alfred of WSD to brief Members on the progress of the public lectures held in Hong Kong Science Museum.
- 3.2 Mr WONG Kwok Fai, Alfred reported that following the initiative as agreed in the ACRQWS Meeting No. 2 of organising a series of public lectures, the ACRQWS organised "All About H₂O" lecture series at Hong Kong Science Museum from April to July 2013 so as to enhance the public awareness of preserving and protecting precious water resources. Twelve organisations including universities, green groups, professional institutions and relevant government departments participated as the supporting organisations of this event. In addition, eight experts, including two of our Members, viz., Prof CHAN Lung Sang and Dr LEE Ka Yan, David, of university professors, medical practitioner and professionals in the relevant fields were invited to introduce various aspects of water resources to the public.
- 3.3 Mr WONG Kwok Fai, Alfred advised that the lecture series comprising 4 different sessions of which "Science of water", "Water resources in China and Hong Kong" and "The challenges of water resources in China" were held on 13 April, 18 May and 15 June respectively. Public response to these 3 sessions was overwhelming. Each session includes two lectures as well as a Q&A session. Mr WONG reported that the Chairman as well as the officiating guest, Secretary for Development, Mr Paul MP CHAN gave speeches and joined the launching ceremony with the Vice-Chairman, Mr MA Lee Tak of WSD, WG Chairpersons and lecture speakers right before the 1st lecture session held on 13 April.

[Post-meeting note: The last session "Water quality and health" was successfully held on 13 July.]

- 3.4 Mr WONG Kwok Fai, Alfred added that in order to complement the lecture series, a special exhibition on "Global and Local Water Resources Distribution", "Desalination Technology", "Water Treatment Technologies",

Water Quality Monitoring-Chemical and Biological Techniques and the concepts of Virtual Water and Reclaimed Water had been/would be held at Hong Kong Science Museum from March to July 2013 in 3 different sessions.

4 Quality of Water in Buildings - Quality Water Recognition Scheme for Buildings (the Scheme)

4.1 The Chairman invited Mr CHAN Shu Key, Charles of WSD to brief Members on the progress of the Scheme.

4.2 Mr CHAN Shu Key, Charles reported the progress as follows -

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(a) There had been continuous increase in the no. of buildings joining the Scheme despite its voluntary nature. The no. of valid certificates up to mid May 2013 had increased to 3,650 and the no. of households enjoying the Scheme had increased to over 1.12 million.

(b) A promotional leaflet on the Scheme had been/would be enclosed as an insert in the water bills issued from March to July 2013. Exhibition panel about the Scheme would also be included in the roving exhibition "Save Water, Cherish the World" commencing June 2013.

4.3 Mr CHAN Shu Key, Charles reported that in order to promote proper maintenance of internal flushing systems in buildings, WSD worked out the implementation details of the new scheme entitled "Flushing Water Plumbing Quality Maintenance Recognition Scheme" to encourage property owners to maintain their internal flushing systems properly. WSD had consulted the WG on Quality of Water in Buildings on 26 February 2013. With in-principle support from the WG, the new scheme was anticipated to be launched in early July 2013.

WSD

4.4 There being no objection to the proposal as mentioned in Item 4.3 above in the meeting, the Chairman proposed and the Members agreed to endorse the implementation of the new scheme.

5 Publication of Water Quality Data

5.1 The Chairman invited Mr CHAN Kin Man of WSD to report the progress on the publication of water quality data of Dongjiang water received in Hong Kong at Muk Wu Pumping Station and that of the drinking water in Hong Kong. Mr CHAN reported that two meetings for the WG on Publication of Water Quality Data were held on 20 November 2012 and 10 June 2013 to endorse the water quality data for the periods from 1 October 2011 to 30 September 2012 and 1 April 2012 to 31 March 2013 respectively. The data was then uploaded to WSD's website on 22 November 2012 and 13 June 2013 respectively after the meetings.

5.2 Mr CHAN Kin Man also reported that the quality of both Dongjiang water

and drinking water complied with the national standard set out for Type II waters in the "Environmental Quality Standards for Surface Water, GB3838-2002" and the World Health Organization's (WHO) "Guidelines for Drinking-water Quality, 2011" respectively in the said periods.

- 5.3** Mr CHAN Kin Man informed the meeting that the next publication of updated water quality data from 1 October 2012 to 30 September 2013 was scheduled for October/November 2013 after endorsement by the WG.
- 5.4** Mr CHAN Kin Man also reported that the radiological quality data of drinking water supply in Hong Kong for the period from 1 October 2011 to 30 September 2012 had been published on WSD's website on 22 November 2012.

WSD

6 Visit to Guangdong

- 6.1** The Chairman invited Mr CHIN Chu Sum to report the progress of the visit to Dongjiang water supply system. Mr CHIN briefed the meeting that a delegation of the ACRQWS comprising 9 non-official members, 1 official member and 6 other HKSAR Government officials conducted a 3-day visit to the Dongjiang-Shenzhen Water Supply System (東深供水系統) on 28 to 30 November 2012. This visit was the first annual visit after the expansion of the scope of the Advisory Committee on 1 April 2012 from its predecessor, "the Advisory Committee on the Quality of Water Supplies".
- 6.2** Mr CHIN Chu Sum reported that apart from visiting the major reservoir in the upstream of Dongjiang viz. Xinfengjiang Reservoir (新豐江水庫), the delegation also visited Boluo Domestic Sewage Treatment Plant (博羅縣城生活污水處理廠), Taiyuan Pumping Station (太園泵站), Shima River Sewage Diversion Works (石馬河調污工程), Dongshen Water Supply Improvement Works Exhibition Centre (東深供水改造工程展覽館), Jinhu Pumping Station (金湖泵站) and Bio-nitrification Plant (生物硝化廠) at Shenzhen Reservoir (深圳水庫). In addition, the delegation this time had a discussion forum with the Bureau of Dongjiang River Basin Administration (東江流域管理局) and an inspection of the Dongjiang water quality at a very close distance by walking along the Green Way (綠道) at Huizhou (惠州).
- 6.3** Upon returning to Hong Kong in the afternoon at the end of the visit, a press conference was held at the Headquarters of WSD. The press was briefed by the Chairman and three Members, viz. Ms WONG Wai Lan, Luciana, Ms TONG Po Chun and Mr LAU Yuet Fan, Ivan on their observations on water quality of Dongjiang during the 3-day visit. They advised that the water quality of Dongjiang was satisfactory and appealed to the Hong Kong public to conserve water. A short video highlighting various parts of the visit was also shown in the press conference. Mr CHIN Chu Sum added that the visit report was issued on 18 June 2013.

7 Use of Reclaimed Water

7.1 The Chairman invited Mr CHIN Chu Sum to brief Members on the progress in respect of the use of reclaimed water. Mr CHIN reported that the formation of a Steering Group within the Government to develop the legal framework and to resolve related implementation issues was under active consideration. Mr CHIN added that the information paper on the water quality standard of reclaimed water was circulated to Members as requested on 20 September 2012.

WSD

7.2 Ms WONG Wai Lan, Luciana asked which government departments formed the ōWG on the Implementation of Reclaimed Water Supply to Sheung Shui and Fanlingö (WG on Reclaimed Water). Mr CHIN Chu Sum replied that apart from WSD, the WG also comprised representatives from relevant bureaux as well as, inter alia, Department of Health, Drainage Services Department (DSD) and Environmental Protection Department (EPD).

7.3 Mr CHENG Man Chung, Daniel enquired whether there was any plan and target of using the reclaimed water. Mr CHIN Chu Sum said that reclaimed water was planned for non-potable uses including toilet flushing in Sheung Shui, Fanling as well as the North East New Territories New Development Areas. Mr CHIN added that the proposal was economically justified as this area was currently using fresh water for flushing and the existing discharge standard of sewage treatment in this area was very stringent. Mr CHIN also advised that this initiative was estimated to save 21 million cubic metres of fresh water each year.

7.4 Prof CHAU Kwai Cheong wished to know the programme of the use of reclaimed water and would like WSD to report, if available, at the next meeting. In response to Prof CHAU, Mr CHIN Chu Sum said that the legal framework to be developed for full implementation in the future would cover the private sector as well.

WSD

7.5 In response to the Chairman, Mr CHIN Chu Sum said that rainwater was one of the water sources for reclamation/reuse.

7.6 In response to Dr CHEUNG Yun Hing, Richard, Mr SIN Kwok Hau of FEHD expressed the concern on the use of stormwater from DSD's floodwater storage tanks for street washing. Mr SIN advised that associated supporting facilities such as street washing vehicle filling points should be provided to tie in with FEHD's existing schedules and practices for street washing.

7.7 Mr MA Lee Tak supplemented that DSD might have some concern about the use of stormwater from the floodwater storage tanks. DSD needed to empty the tanks as soon as possible so as to make the tanks well prepare for the next rainstorm. Mr MA suggested that WSD could arrange a meeting with DSD and FEHD to explore the feasibility of using the stormwater. Mr MA proposed and the Chairman agreed to further discuss this issue in the next

WSD

meeting of the ðWG on Water Resourcesö.

- 7.8 In response to Mr POON Lock Kee, Rocky, Mr MA Lee Tak said the definition of reclaimed water might be formulated for government's internal use by making reference to the technical guideline in respect of the water quality standard of reclaimed water. Mr MA added that some professional institutions (e.g. The Chartered Institution of Water and Environmental Management Hong Kong) could provide effort in working out a universal definition of reclaimed water.

8 Water Conservation Campaign for Primary Schools

- 8.1 The Chairman invited Mr WONG Man Kei, David of WSD to brief the meeting on the progress of the water conservation campaigns for primary schools. Mr WONG reported that:

WSD

- (a) In the school year 2012/13, 81 roadshows were conducted in primary schools right before the meeting. Relevant teaching materials on water conservation had already been produced and dispatched to all primary schools. Teachers might prefer making use of these materials to convey the water conservation message to the students. As such, a drop in the number of roadshows in the coming years might happen.
- (b) This year, 31 schools had registered for the Water Conservation Ambassador Selection Scheme and about 600 Ambassadors would be selected. The certificate presentation ceremony would be held on 9 July 2013.
- (c) For the ðLet's Save Waterö Cap Design Competition with the theme ðSave Drops for Tomorrowö arranged for Primary 1 to Secondary 3 students, over 10,000 designs were received. The Award Presentation Ceremony was held on 4 May 2013. Roving Exhibitions to display the winning caps were/would be held at the Laguna Mall (15 - 21 May); Maritime Square (17 - 23 June); YOHO Town (28 June - 4 July); Tuen Mun Town Plaza (11 - 14 July) and Revenue Tower (5 - 9 August).

- 8.2 Mr WONG Man Kei, David reported that the meeting of the ðWG on Public Educationö was held on 25 September 2012. Mr WONG said that a number of initiatives including ðAll about H₂Oö lecture series and special exhibition; Opening of Water Resources Education Centre; Newspaper supplements on World Water Day; ðLet's Save 10L Waterö Campaign and Ceremony for ðLet's Save Waterö Cap Design Competition were discussed during the WG meeting.

9 The Hong Kong Voluntary Water Efficiency Labelling Scheme (WELS)

- 9.1 The Chairman invited Mr CHIN Chu Sum to brief the meeting on the progress of the implementation of WELS. Mr CHIN reported that -

WSD

- (a) Registration of showers under WELS had commenced in September 2009. Up to end May 2013, 199 models had been registered.
- (b) Registration of water taps under WELS had commenced in September 2010. Up to end May 2013, 126 models had been registered.
- (c) Registration of washing machines under WELS had commenced in March 2011. Up to end May 2013, 150 models had been registered.
- (d) Registration of urinal equipment under WELS had commenced in March 2012. Up to end May 2013, 26 models had been registered.

10 Discussion on matters related to Legionnaires' Disease

- 10.1** The Chairman invited Mr LAM Ching Man of WSD to brief the meeting on the recommendations of the Prevention of Legionnaires' Disease Committee and WSD's follow-up actions.
- 10.2** Mr LAM Ching Man said that WSD had revised the relevant guidelines based on the latest Code of Practice and issued WSD Circular Letter No. 2/2012 to all Licensed Plumbers and Authorized Persons in August 2012.
- 10.3** There being no further action to be followed, the Chairman proposed and Members agreed to delete this item starting from the next meeting.

11 Discussion on formation of a new Working Group on Water Resources in view of the new TOR

- 11.1** The Chairman invited Mr PANG Kwok Fan, Gabriel of WSD to report the follow-up action after the formation of the ÷WG on Water Resourcesö.
- 11.2** Mr PANG Kwok Fan, Gabriel reported that the 1st WG meeting was held on 27 May 2013 and various measures in Total Water Management Strategy promulgated by WSD were discussed/introduced in the meeting. Given some follow-up actions to be taken, Mr PANG said that the next WG meeting was planned to convene three months later.
- 11.3** Dr MAN Chi Sum supplemented that the following topics were also discussed in the 1st WG meeting:-

- (a) Following the visit by the Chairman and some Members along a section of the Sir Cecil's Ride (金督馳馬徑) and the Aroma Walk (香花徑) at North Point on 16 December 2012, the WG might investigate the feasibility of harvesting more raw water resources by identifying suitable sources of stream water outside the Gathering Ground for non-potable application.
- (b) Reuse of rainwater and treated sewage effluent, as well as development of seawater desalination
- (c) Underground water

WSD

(d) Impacts of climate change on water resources

The Chairman and Dr MAN Chi Sum both welcomed Members to join the next WG meeting.

12 Development of the desalination plant at Tseung Kwan O

12.1 The Chairman invited Mr KWOK Wing Cheong of WSD to brief the meeting on the progress of the desalination project. Mr KWOK reported that the Consultants, Black & Veatch Hong Kong Limited, was appointed to carry out a Feasibility Study on the proposed desalination plant at Tseung Kwan O. The consultancy commenced on 31 December 2012 for completion in end 2014. The Study was in progress and currently at project inception and data collection stage for the detailed investigation work to be carried out later on.

WSD

12.2 In response to Mr CHENG Man Chung, Daniel, Mr KWOK Wing Cheong replied that the proposed desalination plant at Tseung Kwan O was the first desalination project producing portable water by reverse osmosis (RO) technology in WSD.

12.3 Dr SHIN Kam Shing, Paul asked whether the Feasibility Study included the assessment of environmental impacts arising from the desalination project. Mr KWOK Wing Cheong replied that environmental impact assessment was one of the major tasks of the Study. WSD would submit an application to EPD for a study brief to conduct a detailed environmental impact assessment.

12.4 In response to Prof CHAU Kwai Cheong, Mr KWOK Wing Cheong replied that post treatment of the fresh water produced from the desalination plant was needed so as to ensure that the final water quality would fully comply with the relevant WHO standard. Mr KWOK also said that the fresh water output from the desalination plant was planned to feed to the Tseung Kwan O Primary Fresh Water Service Reservoir for distributing fresh water supply to areas including Kowloon East.

12.5 Mr CHENG Man Chung, Daniel suggested that it was cost effective and environmental friendly if we could make use of excessive heat energy from some facilities e.g. incinerator, to dehydrate the RO concentrate to salt crystals. Mr MA Lee Tak said that this suggestion would be provided to the Consultants for consideration.

12.6 In response to Dr SHIN Kam Shing, Paul, Mr MA Lee Tak replied that the Consultants would study the feasibility of using landfill gas from the adjacent landfill for the electricity demand of the desalination plant.

12.7 Noting that there was a cost difference between the fresh water produced from Dongjiang water and desalination plant, Mr POON Lock Kee, Rocky enquired for WSD's strategy on controlling the output from the desalination plant after its completion. Mr MA Lee Tak replied that the Consultants would suggest the recommended phasing of plant production and its capacities at individual

phases. Mr MA added that the final decision on the output from the desalination plant also had to take account of the public's views for a consensus on precious water resource by that time.

Any Other Business

13 Core Membership for Working Groups

13.1 The Chairman proposed core membership for the 4 WGs of the Advisory Committee so that WG meetings would be attended by Members who understood the issues better on a more regular basis. The Chairman added that non-core members were always welcome to join any WG meetings as before.

13.2 Prof CHAU Kwai Cheong and Dr SHIN Kam Shing, Paul supported the Chairman's proposal. Dr SHIN also suggested that Members could provide written comment before or after the WG meetings if they could not attend the meetings.

13.3 After deliberations, the Chairman said that the Secretary would issue an invitation to all Members to seek their advice on which WG(s) that they would like to join voluntarily as a Core Member.

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[Post-meeting note: An invitation email, which listed out the objective/terms of reference and the approximated frequency of meetings for each WG, to seek Members' advice on joining the WGs was sent to all Members on 21 June 2013.]

13.4 Dr CHING Cheuk Tuen, Regina of DH asked whether experts outside the Advisory Committee would be invited as co-opted members. Mr MA Lee Tak said that the current arrangement by inviting them to attend the meeting for discussion of some particular topics was a more flexible approach instead of extending the existing membership.

14 There being no further items raised, the Chairman thanked Members for attending the meeting and adjourned the meeting at 11:00 a.m.