

Advisory Committee on Water Supplies (2022-2024)
Minutes of Second Meeting

Date: 21 October 2022 (Friday)

Time: 2:30 p.m.

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

Present

Prof KWAN Kai Cho, Joseph	Chairman
Mr CHEUNG Hau Wai	Working Group Chairman
Ir NG Chun Keung	Working Group Chairman
Mr LAU Che Feng, Edwin	Working Group Chairman
Dr CHENG Kam Wah, Edmond	Working Group Vice-Chairman
Mr LAM Yat Fung, James	Working Group Vice-Chairman
Ir TANG Ming Sum, Michelle	Working Group Vice-Chairman
Prof CHE Chi Ming	Member
Ms CHOW Ka Wing, Rachel	Member
Ms CHUNG Lai Kam, Kathy	Member
Dr DUAN Huan Feng	Member
Mr LI Kam Wong, Arthur	Member
Prof SHIH Kaimin	Member
Sr WONG Kwok Leung, Paul	Member
Mr WONG Kwun Kit, William	Member
Mr YAU Kam Wing, Kelvin	Member
Mr YIU Ming, Jeff	Member
Dr YU Yuen Ping, William	Member
Ms YUEN Yan Ling, Elaine	Member
Mr LO Kwok Wah, Kelvin	Member (Water Supplies Department)
Mr WONG Kwok Fai, Alfred	Member (Development Bureau)
Ms HO Kit Yee, Kitty	Member (Architectural Services Department)
Mr LAU Shing Cheong, Edwin	Member (Drainage Services Department)
Mr CHEN Che Kong	Member (Environmental Protection Department)
Dr CHOW Chor Yiu, Tony	Member (Department of Health)
Mr YEUNG Wong Pan, Antony	Member's Representative (Housing Department)
Mr FUNG Cheuk Pong, Ronald	Secretary (Water Supplies Department)

Water Supplies Department Representatives in Attendance

Mr CHAU Sai Wai	Deputy Director
Mr MA Hon Wing, Wilson	Assistant Director
Mr CHOI Lok Wong, Samuel	Assistant Director

Mr CHOY Tak Yip	Chief Chemist
Mr LEUNG Chi Hung, Simon	Chief Engineer
Mr YIP Ka Chun, Gary	Chief Engineer
Mr CHUNG Wai Fung	Senior Engineer
Mr LAU Cheuk Fung, Calvin	Senior Engineer
Mr LEE Hong Nin, Kevin	Senior Engineer
Mr MAN Ka Leung, Anthony	Senior Mechanical Engineer
Mr YUEN Tik Hong	Senior Engineer
Mr POON Fung, Calvin	Engineer (Note-Taker)

Absent with Apologies

Prof SHANG Chii	Member
Prof TSE Lap Ah, Shelly	Member
Dr WANG Peng	Member

Item

1. Opening Remarks

- 1.1 The Chairman welcomed all Members and representatives of Water Supplies Department (WSD) to the meeting.
- 1.2 The Chairman informed the meeting that Prof SHANG Chii, Prof TSE Lap Ah, Shelly and Dr WANG Peng were unable to attend the meeting and had sent in their apologies.

Agenda Items

2. Confirmation of Minutes of Last Meeting

- 2.1 The Chairman advised that the draft minutes for last meeting had been circulated to the Members on 22 September 2022 with no comments received. There being no further amendment proposed at the meeting, the draft minutes were confirmed.

3. Report of Working Group on Operational Matters

- 3.1 The Chairman invited Mr CHEUNG Hau Wai, Chairman of the Working Group (WG) on Operational Matters, to report the key issues discussed at the 1st WG

meeting held on 26 August 2022.

Work Plan for 2022-2024

- 3.2 Mr CHEUNG Hau Wai reported that the proposed work plan for the WG for 2022-2024 was discussed in the WG meeting. The plan was accepted by the WG Members.

Update on Application of Building Information Modelling (BIM) Technology in Waterworks

- 3.3 Mr CHEUNG Hau Wai reported the following:

- WSD presented an update on the application of BIM technology in waterworks in Hong Kong, including digital twin as well as project delivery and application for water supply.
- WG Members supported WSD for the extensive adoption of BIM and looked forward to the wider use of the technology in the industry upon acknowledging and recognizing its benefits and wide applicability.

General Acceptance System for Plumbing Products and Surveillance Programme

- 3.4 Mr CHEUNG Hau Wai reported the following:

- WSD presented the General Acceptance (GA) system adopted for plumbing product and the associated surveillance programme, and the GA Product Shop Scheme.
- WG Members appreciated the effort of WSD to enhance the conformity of plumbing products with the GA.

4. Report of Working Group on Government Network and Inside Service

- 4.1 The Chairman invited Ir NG Chun Keung, Chairman of the WG on Government Network and Inside Service, to report the key issues discussed at the 1st WG meeting held on 1 September 2022.

Work Plan for 2022 - 2024

- 4.2 Ir NG Chun Keung reported that the proposed work plan for the WG for 2022-2024 was presented and discussed in the WG meeting. The plan was agreed by the WG Members.

Water Safety Plan for Building, Quality Water Supply Scheme for Buildings – Fresh Water (Management System) and Water Safety Plan Subsidy Scheme

4.3 Ir NG Chun Keung reported the following:

- WSD gave a presentation to brief WG Members on the details of the Water Safety Plan for Building (WSPB), Quality Water Supply Scheme for Buildings – Fresh Water (Management System) (QMS) and Water Safety Plan Subsidy Scheme (WSPSS).
- WSD had been promoting implementation of WSPB through developing relevant guidelines and templates as well as providing technical advice to building owners, property management agents and the plumbing industry.
- The WSPSS would provide financial assistance to property owners of eligible buildings to initiate implementation of WSPB at their premises including water safety risk assessment on the internal plumbing system for formulation of WSPB and rectification works for controlling the risk(s) as recommended in the risk assessment.
- The QMS was launched to give recognition to property owners and property management agents who had implemented WSPB in accordance with the prescribed criteria for effective maintenance of the building's internal plumbing system.
- WG Members appreciated WSD's efforts to promote proper maintenance of inside services via various channels. In order to increase the reach of the publicity on WSPSS to boost up the application rate, WSD would provide more publicity materials for WG Members to promote the scheme in their sectors and solicit their assistance in encouraging participation of eligible buildings.

4.4 Dr CHOW Chor Yiu, Tony enquired the actions required from property owners and management agents to obtain recognition in QMS and whether site inspection or other documents would be required by WSD to process the application. Mr CHOY Tak Yip of WSD advised that the property owners and management agents could make reference to the application details and the WSPB templates available from WSD's webpage and appoint a Qualified Person (QP) trained in WSPB to perform the water safety risk assessments. The risk assessment summary table endorsed by QP should be submitted together with other documents and records for WSD's consideration of the application. WSD would award certificates to successful buildings to recognise the responsible parties' efforts in maintaining the internal plumbing systems properly. A certain percentage of the approved applications would be selected

by WSD for auditing on completeness of WSPB.

- 4.5 Dr Tony CHOW further enquired the valid period of certificate for QMS. Mr CHOY Tak Yip of WSD advised that the certificate was valid for 2 years and were classified into three grades (Blue, Silver and Gold) according to the length of the continuous participation of a building in the Scheme. The certificates or their copies could be displayed in those awarded buildings, stationeries and promotional materials, subject to the WSD's guidelines. Mr CHAU Sai Wai of WSD supplemented that it was observed in some previous cases that the water tanks of the buildings had not been cleaned for a long period of time which led to water quality issues, the QMS aimed to promote WSPB and QMS to and assist property owners and property management agents to safeguard drinking water quality in their buildings. WSD would continue to promote WSPB and QMS to property owners and encourage their participation in them.

5. Report of Working Group on Water Conservation and Education

- 5.1 The Chairman invited Mr LAU Che Feng, Edwin, Chairman of the WG on Water Conservation and Education, to report the key issues discussed at the 1st WG meeting held on 14 September 2022.

Work Plan for 2022 - 2024

- 5.2 Mr Edwin LAU reported that the work plan of the WG was presented to WG members. WG members generally agreed on the proposed work plan and the work plan was endorsed.

Overview of Water Conservation Activities

- 5.3 Mr Edwin LAU reported the following:
- WSD provided an overview of the current water conservation activities to WG Members which were introduced in terms of Education and Public Engagement, Domestic Intervention, Non-Domestic Intervention and Water Using Products.
 - WG Members appreciated the efforts of WSD for the series of water conservation activities to promote and enhance public's awareness and knowledge on water conservation.

Conserving Local Yield by Inter-Reservoirs Transfer Scheme

5.4 Mr Edwin LAU reported the following:

- WSD presented the Inter-Reservoirs Transfer Scheme which was to construct a water tunnel between Kowloon Byewash Service Reservoir and Lower Shing Mun Reservoir to convey surplus water from the former to the latter with an aim to mitigating the flood risk in West Kowloon area and to generating additional water yield.
- WG Members appreciated WSD in enhancing the utilisation of water resources by the Inter-Reservoirs Transfer Scheme.

5.5 Prof SHIH Kaimin enquired whether there were separate teaching kits targeting different levels of schools to suit their abilities. Mr LAU Cheuk Fung, Calvin of WSD advised that the target groups of the education programme were kindergartens and primary schools, and different teaching kits were developed for kindergartens, lower primary and upper primary school students.

5.6 Mr CHAU Sai Wai of WSD added that water conservation would be challenging under the current situation of COVID-19 with increased water usage being observed. Mr Edwin LAU noticed that some promotion videos regarding proper hand hygiene often having running tap water in the background might give an improper demonstration to the public. Mr CHAU Sai Wai of WSD advised that organisations might not have the intention to promote hand washing with running tap water to the public and might not be aware of the details during production. Dr Tony CHOW added that scenes of running tap water had not appeared in the recent promotion materials from Department of Health. For other organisations, the scenes might be presented in an exaggerated manner to deliver the key message to the public. Mr CHAU Sai Wai of WSD added that WSD could consider to provide friendly reminders to the organisations for their information.

6. Adoption of On-Site Chlorine Generation Technology for Fresh Water Treatment

6.1 Mr MAN Ka Leung, Anthony of WSD gave a presentation on the “Adoption of On-Site Chlorine Generation (OSCG) Technology for Fresh Water Treatment”.

6.2 Prof SHIH Kaimin enquired whether industrial grade sodium chloride was used for the generation of chlorine gas. Mr Anthony MAN of WSD advised that food grade sodium chloride imported from the Mainland was used for the production. The use of industrial grade sodium chloride might cause damage

to the membrane of electrolyser and not be beneficial to the operation of OSCG plants in the long run. Prof SHIH Kaimin suggested that stable supply and sufficient storage of food grade sodium chloride would be required for chlorine gas generation on site. Mr Anthony MAN of WSD advised that the supply of food grade salt from the Mainland had been stable and reliable nowadays, and there were salt storage warehouses located at various water treatment works to provide suitable storage. Mr CHOY Tak Yip of WSD advised that as multiple suppliers were available in the market, the supply of sodium chloride was much more secure than liquid chlorine. In terms of storage, sodium chloride only required basic indoor storage, while liquid chlorine was a kind of dangerous goods which required special storage facilities for containment. Prof SHIH Kaimin shared that apart from the limited supply and strict storage requirements of hazardous chemicals, their restrictions during transportation across the border would be eased after the adoption of sodium chloride. Mr CHOY Tak Yip of WSD supplemented that the transportation of liquid chlorine had been challenging which required coordination between different departments for safe delivery. Besides, to prevent undesirable side reactions in the OSCG process, requirements on metal contents and halide impurities in addition to the specification of regular food grade sodium chloride had been included. Prof SHIH Kaimin suggested that manpower should be reserved for monitoring and maintenance of the system as formation of deposits caused by sodium hypochlorite and brine might occur and clog the system after some time. Mr Anthony MAN of WSD advised that planned maintenance works for the OSCG plants had been carried out to maintain the system reliability which included, amongst others, inspections at tanks and pipelines of the system to check on formation of deposits.

- 6.3 Sr WONG Kwok Leung, Paul enquired if WSD had made reference to the disinfection processes overseas and whether the cost effectiveness had been improved after adoption of OSCG. Mr Anthony MAN of WSD advised that WSD had sought advices from consultants to review international practices and noticed that OSCG had been introduced to produce NaOCl for disinfection. Technical visits had also been made to the US and South America, and the technology had been thoroughly developed before it was decided to be adopted. Apart from cost saving in procuring expensive liquid chlorine (due to the sophisticated logistics for dangerous goods), OSCG could provide a much secured source of chlorine and a much safer operation for water treatment.

7. Protection of tenants of subdivided units from being overcharged for water

- 7.1 Mr CHUNG Wai Fung and Mr LEE Hong Nin, Kevin of WSD gave a presentation on “Protection of tenants of subdivided units from being overcharged for water”.
- 7.2 Dr Tony CHOW noticed that meters would require installation by designated persons and enquired the cost of a water meter. Mr Kevin LEE of WSD advised that the current fee for providing a WSD meter was \$120 in accordance with Schedule 1 of the Waterworks Regulations.

8. Any Other Business

- 8.1 Mr YIP Ka Chun, Gary of WSD advised that the Greater Bay Area Water Forum cum Shenzhen-Hong Kong-Zhuhai-Macao Water Supply Seminar would be held on 17 November 2022 at the Hong Kong Palace Museum and Shenzhen simultaneously with live streaming. The Chairman reminded Members to take note of the event and encouraged them to join.
- 8.2 There being no other business, the Chairman adjourned the meeting at 4:35 p.m.