

**Drinking Water Safety Advisory Committee**  
**First Meeting**

**Date** : 2 February 2018 (Friday)  
**Time** : 3:00 p.m. to 5:00 p.m.  
**Venue** : Conference Room 2, G/F, Central Government Offices,  
2 Tim Mei Avenue, Tamar, Hong Kong

**Minutes of Meeting**

**Members Present**

Ir LEUNG Kwong Ho, Edmund	Chairman
Ir Dr CHAN Hon Fai	Vice Chairman
Dr CUNLIFFE David Anthony	
Prof HO Kin Chung	
Mr HO Kui Yip, Vincent	
Prof LAU Kar Pui, Susanna	
Ir Prof LO Man Chi, Irene	
Dr MA Yiu Wa, Anthony	
Prof TSE Lap Ah, Shelly	
Dr WONG Siu Ming, Raymond	
Dr WONG TAAM Chi Woon, Vivian	
Ir WONG Yiu Sun, Peter	
Mr HON Chi Keung	Permanent Secretary for Development (Works)
Dr CHING Cheuk Tuen, Regina	Consultant Community Medicine (Non-Communicable Disease), Department of Health
Mr WONG Chung Leung	Director of Water Supplies
Mr TSUI Wai	Secretary Team Leader (Secretariat Support Unit for the International Expert Panel on Drinking Water Safety) ("SSU"), Development Bureau ("DEVB")

## **In Attendance**

Mr WONG Wai Lun, Michael	Secretary for Development	<i>[for opening remarks only]</i>
Mr CHAU Siu Hei, Francis	Deputy Secretary for Development (Works) 3	
Mr CHU Siu Ki	Assistant Secretary (Infrastructure Coordination) 2, DEVB	
Ms FOK Ka Lai	Assistant Secretary (Water Safety) 1, DEVB	
Mr CHAN King Yuen	Assistant Secretary (Water Safety) 2, DEVB	
Mr WONG Yiu Wing	Engineer (SSU), DEVB	
Mr CHAU Sai Wai	Deputy Director of Water Supplies	
Mr LAM Saint Kit, Byron	Assistant Director/Task Group, Water Supplies Department (“WSD”)	
Mr KWOK Yau Ting, Kelvin	Chief Chemist, WSD	
Mr YU Chi Wing	Senior Chemist/Water Quality (Standards and Monitoring), WSD	

**Action by**

### **Agenda Item 1: Opening Remarks by the Secretary for Development**

1. Mr Michael WONG, the Secretary for Development, thanked Members for taking time out of their busy schedules to participate in the Drinking Water Safety Advisory Committee (“the Committee”).

2. Mr Michael WONG said that, as a result of the lead found in drinking water incident in 2015, the public had become more concerned with drinking water safety. Against this background, the Government had launched the Action Plan for Enhancing Drinking Water Safety in Hong Kong (“Action Plan”) in September 2017. Whilst the WSD had made a lot of effort in supplying drinking water of good quality, the Government had to harness the collective wisdom and insights of all sectors to ensure effective implementation of the Action Plan as well as further enhance and safeguard water quality in Hong Kong. With experts and professionals working together, he was confident that the Committee would assist the Government in formulating comprehensive and practicable policies and measures to further safeguard the safety of drinking water in Hong Kong.

*[The Secretary for Development left the meeting at this juncture.]*

## **Agenda Item 2: Terms of Reference, Operation Arrangements and Declaration of Interests**

(DWSAC Paper No. 1/2018)

3. The Secretary briefed Members on the salient parts of the proposed operation arrangements, including the meeting frequency and material disclosure arrangement.
4. The Secretary also briefed Members on the guidelines on declaration of interests at Annex 2 to the paper. Members could make declaration at the meeting when they were aware of any conflict of interest.
5. The meeting endorsed adoption of the proposed operation arrangements of the Committee as set out in the paper.

## **Agenda Item 3: Drinking Water Quality Management System of Water Supplies Department**

(DWSAC Paper No. 2/2018)

6. Mr Kelvin KWOK, Chief Chemist of WSD, briefed Members on the Drinking Water Quality Management System (“DWQMS”) of WSD. After making a brief introduction of the existing water supply system in Hong Kong, Mr Kelvin KWOK went through with Members the components of the DWQMS including (i) water quality policy and health-based targets; (ii) water safety plan covering system assessment, monitoring, management and communication; and (iii) surveillance arrangement.
7. Members raised no comments on WSD’s DWQMS.

## **Agenda Item 4: Action Plan for Enhancing Drinking Water Safety in Hong Kong**

(DWSAC Paper No. 3/2018)

8. Mr Kelvin KWOK introduced the Action Plan which covered five core components, namely (i) drinking water standards and enhanced water quality monitoring programme (“Enhanced Programme”); (ii) plumbing material control and commissioning requirements for new plumbing installations; (iii) water safety plan; (iv) publicity and public education; and (v) water safety regulatory regime.
9. In response to a Member’s enquiry about the details of the review on the drinking water standards, Mr Kelvin KWOK responded that WSD had engaged consultants to conduct a review on the international drinking water standards to determine the parameters and their standard values that should be adopted in the Hong Kong Drinking Water Standards. Members expressed support to WSD’s effort in carrying out the review which could serve as a good reference to the neighbouring cities.

10. A Member enquired about the laboratory for testing plumbing materials. In response, Mr CL WONG, the Director of Water Supplies, advised that a laboratory for testing plumbing materials was being set up in WSD. As to the testing standards, Mr CL WONG advised that the plumbing materials should be tested to comply with the requirements stipulated in the Waterworks Ordinance and its Regulations, which were either British Standards (“BS”), BS European Norm (“EN”), BS EN ISO or other international standards as appropriate.

11. Another Member enquired how the target yearly number of samples under the Enhanced Programme could be achieved given the participation was entirely voluntary. Mr Kelvin KWOK explained the methodology of how premises were selected for sampling on a random basis over the territory under the Enhanced Programme. Mr CL WONG added that, according to the selection methodology designed by an independent consultant, 30 additional backup premises for each target premises would also be selected at the same time with a view to achieving the target yearly number of samples. Mr Kelvin KWOK also highlighted that, in order to ensure the randomness of the water samples taken, the timing of collecting the samples would not be indicated in the invitation letter to the selected premises to avoid the occupier making unnecessary preparation for the sampling (e.g. flushing the tap beforehand) which might affect the randomness of the water samples.

12. Members supported the two-Tier sampling protocol adopted by the Enhanced Programme, in particular the Tier 1 Random Day Time (“RDT”) sampling which was an internationally recognized sampling protocol that could truly reflect the exposure of consumers to the six metals being monitored. Some Members further suggested WSD to collect random night time samples to better visualize the water quality round the clock. While the suggestion made by Members was appreciated, Mr CK HON, Permanent Secretary for Development (Works), said that as the adoption of the RDT sampling under Enhanced Programme had been thoroughly deliberated and endorsed by the International Expert Panel on Drinking Water Safety (“IEP”), it might not be appropriate to make changes to the sampling protocol without any sound justifications. Mr CK HON added that when sufficient local data were collected under the Enhanced Programme, say, in 3 to 5 years’ time, the Government would carry out a review on the metal parameters of the Hong Kong Drinking Water Standards, and the Committee’s view/endorsement on the outcome of the review would be sought.

13. A Member enquired if re-sampling would be conducted at the same premises for verification purpose in case metal content of the water sample was found exceeding the standard. In response, Mr Kelvin KWOK explained that basically RDT samples were collected for reviewing the Hong Kong Drinking Water Standards based on random samples collected over the territory and hence re-sampling would not be appropriate. When sufficient water samples had been collected, the metal exposures due to consumption of drinking water for the population in each of the water supply zones could be determined. A Member raised a follow-up question as to whether investigation would be conducted at

those premises with lead content in the RDT samples found exceeding the standard. Mr Kelvin KWOK explained that if the lead content in the RDT sample was found exceeding the standard, the 30-minute stagnation (“30MS”) sample would be tested to verify the test result of the RDT sample. For the premises with the RDT sample’s lead content (14µg/L) found exceeding the standard, the 30MS sample was subsequently tested and found complying with the standard, and hence the water quality of the premises concerned was considered meeting the standard and hence no follow-up investigation was necessary.

**Agenda Item 5: Consultancy Study for Developing Regulatory Framework for Drinking Water Safety Regime in Hong Kong**

(DWSAC Paper No. 4/2018)

14. The discussions are kept in strict confidence.

**Agenda Item 6: Proposed Work Plan of the Committee**

(DWSAC Paper No. 5/2018)

15. The Secretary briefed Members on the proposed works plan of the Committee in the coming few years, which was basically drawn up following the terms of reference of the Committee, viz. (i) development of the regulatory regime for drinking water safety, (ii) review of Hong Kong Drinking Water Standards, (iii) review / formulation of policy-related strategies and measures, and (iv) keeping abreast of international development on water quality and safety.

*[Prof KC HO arrived at this juncture.]*

16. Regarding international development on water quality and safety, a Member pointed out that apart from microplastic and antibiotics, there had been increasing concerns from the public on Pharmaceuticals and Personal Care Products found in the raw water. A Member also shared that the Singapore International Water Week to be held in July 2018, in which there would be a workshop focusing on emerging contaminant issues.

17. A Member advised that the World Health Organization would release a document in March 2018 regarding the development of national standards on regulations. Though the document was basically for countries with limited resources, it laid down the principal guidelines that would provide relevant reference to DEVB’s consultant for carrying out the in-depth study.

18. A Member informed that the Hospital Authority had a team of toxicology experts screening signals relating to poisoning which may identify some issues related to drinking water. The information obtained by the expert team would be useful to DEVB and WSD in conducting surveillance of health-based water quality.

19. The Chairman welcomed the above useful information provided by Members and suggested that Members would inform the Secretariat in case they would like to bring up any new information or issues for discussion in the Committee in future.

**Agenda Item 7: Any Other Business**

20. There being no other business, the meeting adjourned at 5:00 p.m.