Legislative Council Establishment Subcommittee Regrading of Assistant Director of Water Supplies posts in Water Supplies Department

Follow-up Issues of the Meeting held on 19 June 2017

The Legislative Council Establishment Subcommittee discussed the proposed regrading of Assistant Director of Water Supplies posts in Water Supplies Department at the meeting on 19 June 2017. The Administration was requested to provide the following information:

- the concrete timetable for implementing various recommendations of the Report of Commission of Inquiry into Excess Lead Found in Drinking Water;
- (2) relevant reports by the expert consultants engaged by the Development Bureau/Water Supplies Department for the study of and provision of advice on matters relating to drinking water safety after the lead-in-drinking-water incident;
- (3) measures taken forward by the Water Supplies Department to improve and strengthen the control of the drinking water quality in Hong Kong;
- (4) in the regrading proposal, the justifications that the Chief Waterworks Chemist of the Waterworks Chemist grade can only be promoted to the post of Assistant Director/Mechanical and Electrical (i.e. AD/M&E) of Mechanical and Electrical Branch, but not to the Branch head (i.e. AE/Dev) managing Water Science Division.

Our response to the request is set out below:

- (1) The current progress of implementation of various recommendations of the Commission of Inquiry into Excess Lead Found in Drinking Water (CoI) by the Development Bureau (DEVB) and the Water Supplies Department (WSD) is as follows:
 - With the support of the CoI, DEVB established an International Expert Panel on Drinking Water Safety (IEP) on 1 June 2016, comprising members from Australia, Canada, United Kingdom and local experts, to provide expert advice on matters relating to drinking water safety;

- (ii) In response to the recommendations of the CoI that the Government should, at the policy level, review the adequacy of the existing legislative framework and regulatory regime in safeguarding the safety and quality of drinking water in Hong Kong, and set up an independent body to overlook the performance of WSD and water quality in Hong Kong generally, DEVB established an inter-bureau and interdepartmental working group in March 2016 and engaged a consultant to study the water safety regimes of leading jurisdictions. So far, we have gathered preliminary information regarding the water safety regimes of leading overseas jurisdictions and we will actively explore the formulation of the water safety regulatory regime, including indepth study on the necessity of legislation for drinking water safety and the development of a regulatory framework;
- (iii) In regard to the recommendations on the formulation of drinking water standards and sampling protocols for Hong Kong, WSD has engaged an expert consultant from the United Kingdom to conduct a holistic review and study, and has consulted the IEP in this regard, including the study in stages of the drinking water quality parameters recommended by the World Health Organization, and the reviews on the purposes and limitations of the various sampling protocols and their applicability to Hong Kong's situation. Having regard to the study findings and proposals, DEVB and WSD are deliberating with relevant bureaux/departments and the trades, including relevant professional bodies, plumbing trade associations and licensed plumbers, on the implementation details with a view to finalizing the proposals as soon as possible;
- (iv) Besides, the CoI recommends that WSD should establish and implement a Water Safety Plan (WSP) for Hong Kong in general, and WSPs specifically for other developments in Hong Kong. In response to the recommendations and with reference to the advice of an Australian expert consultant, WSD has initiated a holistic review of the existing WSP for WSD. With assistance of the Australian expert consultant, WSD has largely completed the review and integrated the enhanced WSP into a newly established Drinking Water Quality Management System. WSD has also planned to promulgate in stages the guidelines and templates for developing WSP for general buildings as well as specific buildings, and will provide support to property owners and management agents in facilitating the development and implementation of the respective WSP for buildings. Pilot schemes are being carried out in several development projects.

- (v) The CoI recommends that WSD should set out clearly, in the legislation or appropriate medium, the latest approved pipes and fittings as well as the latest standards for all plumbing materials and components to be used in the construction of inside service. As a matter of fact, WSD has uploaded to WSD's website the approved pipes and fittings and the latest applicable standards for plumbing materials and components for the construction of inside service in October 2015. The industry has also been informed via WSD circular letters. Besides, WSD has updated the standards of the plumbing materials in the Waterworks Regulations (Cap. 102A) and the proposed amendments have been submitted to Legislative Council for negative vetting in May 2017;
- (vi) The CoI recommends that WSD should define the duties of licensed plumbers under the Waterworks Ordinance (Cap. 102), taking into account relevant provisions of the Construction Workers Registration Ordinance (Cap. 583) which allow skilled workers to perform plumbing installations. In this regard, WSD has completed the relevant amendment bill, including setting out clearly the persons designated for carrying out plumbing works (including skilled workers), the responsibilities of licensed plumbers and designated persons. The amendment bill was submitted in April 2017 and is now being considered by the Legislative Council;
- (vii) The CoI recommends that WSD should define the roles, involvements and responsibilities of other parties, who are in practice involved in the design, construction and maintenance of inside service; review the existing arrangement where an individual LP can be responsible for plumbing installations of any scale at any given time; and consider the need and feasibility to include other professionals and specialised contractors in the design and construction of inside service. For this, WSD has set forth on a holistic review of the Waterworks Ordinance and Waterworks Regulations in regard to, inter alia, the roles, involvements and responsibilities of relevant parties responsible for the design and construction of the fire services and inside services (plumbing systems), and the licensing/registration regime for parties (including contractors and waterworks professionals) responsible for the construction, etc. of plumbing systems. WSD is consulting relevant stakeholders in regard to the above matters. Prior to the completion of legislative review and amendment, WSD and Construction Industry Council jointly issued the "Good Practice Guide on Plumbing Works" in March 2017, clarifying the roles and responsibilities of relevant stakeholders in plumbing works. In regard to the surveillance and inspection of inside services, WSD has

launched a pilot scheme of risk-based random inspection of plumbing works during construction stage of new plumbing installations with effect from 1 April 2017. The risk factors to be considered include the scale and nature of the projects, as well as the workload, past performance, experience and Continuing Professional Development credits of the licensed plumbers engaged, etc.; and

- (viii) In regard to the recommendations of the CoI on strengthening the management and training of licensed plumbers, the training courses provided by the Vocational Training Council and the Construction Industry Council for licensed plumbers and plumbing workers have covered the potential causes and hazards of drinking water contaminations and the associated precautionary measures since September 2016, so as to enhance their awareness on drinking water safety. WSD also launched the Voluntary Continuing Professional Development Scheme for licensed plumbers in October 2016 jointly with the plumbing industry stakeholders.
- Various studies conducted by the expert consultants in response to the (2)recommendations of the CoI and to safeguard drinking water safety are in progress. DEVB and WSD are deliberating on the implementation details of proposals expert consultants with the by the the relevant bureaux/departments and the trades, including relevant professional bodies, plumbing trade associations and licensed plumbers, with a view to finalizing the proposals as soon as possible. The government will release the details when the proposals are finalised.
- (3) To enhance control of and thus safeguard drinking water quality in Hong Kong, WSD has adopted a multi-pronged approach and took improvement measures in three aspects, namely material control, management and training of licensed plumbers, and surveillance and inspection of plumbing works.

As far as material control is concerned, WSD has uploaded to WSD's website the approved pipes and fittings and latest applicable standards for plumbing materials and components for the construction of inside service in October 2015. The industry has also been informed via WSD circular letters. Besides, WSD has updated the standards of the plumbing materials in the Waterworks Regulations and the proposed amendments have been submitted to Legislative Council for negative vetting in May 2017. Moreover, WSD has strengthened the current system. Apart from imposing a five-year validity period for plumbing products with General Acceptance¹

¹ At present, the WSD has a GA system in place to pre-approve plumbing products used in plumbing projects. For a plumbing product to obtain a GA status, the supplier should submit either test results of a sample of the product or a certificate issued by an authoritative certification body to prove conformity of the product to the statutory standards.

(GA) since August 2015, WSD will introduce a surveillance programme for sampling and conducting verification test for the plumbing products with GA and set up a material laboratory in 2017-18 to conduct the verification test. WSD also launched the stage one voluntary labelling scheme which mainly covers water taps and mixers with GA on 1 April 2017 to help the public identify plumbing products with GA.

In regard to strengthening of the management and training of licensed plumbers, as mentioned above, WSD has taken forward measures including the revision of the syllabi of relevant training courses and the launch of the Voluntary Continuing Professional Development Scheme for licensed plumbers in collaboration with stakeholders in the plumbing industry. As regards the regulatory control of licensed plumbers, WSD has reviewed the existing arrangements for inspection of plumbing works and has tightened up the point penalty system for assessing the performance of licensed plumbers. Moreover, WSD has strengthened enforcement actions. Since the occurrence of the lead-in-drinking-water incident, licenses of a total of six licensed plumbers have been cancelled or suspended due to contravention of the Waterworks Ordinance by using leaded solder.

As far as surveillance and inspection are concerned, WSD stipulated the requirements of testing of four additional heavy metals for drinking water samples and non-destructive tests on solder pipe joint in newly installed inside service in July 2015. WSD has also carried out a risk-based random inspection of plumbing works during construction stage of new plumbing installations with effect from 1 April 2017. Moreover, WSD has introduced a systematic flushing protocol for newly installed inside services to further reduce the leaching of heavy metal from the new plumbing system. This will be applicable to the new plumbing works applying for approval of completion on or after 31 July 2017.

(4) The Assistant Director/Development (AD/Dev), as the Executive in charge of the Development Branch, is responsible to lead three divisions, viz. the Water Science Division, Development (1) and (2) Divisions to take forward various waterworks policies and work. The Water Science Division is managed by the Chief Waterworks Chemist (CCh) to monitor the quality of water supplies to ensure its compliance with the prescribed standards. The Development (1) and (2) Divisions are respectively managed by two Chief Civil Engineers who assist AD/Dev to take forward various waterworks policies and work of primarily civil engineering in nature, e.g. the formulation, review and implementation of the Total Water Management Strategy, including schemes to develop new water sources (i.e. sea water desalination, reclaimed water, grey water recycling and rainwater harvesting), control on water demand through managing water loss (including loss from underground water supply network), promoting water conservation through hard and soft measures and continuing the expansion of salt water supply system. Furthermore, AD/Dev leads the negotiation with the Guangdong authorities for the importation of Dongjiang water and looks after grade management of professional and technical staff of civil engineering discipline. After assessment, we thus consider that the arrangement to have AD/Dev post to be taken up by staff from the civil engineering discipline is appropriate.

As a matter of fact, based on operational experience, CCh has never been promoted to take up the AD/Dev post in the past. On the contrary, CCh has been promoted to take up the post of Assistant Director/Mechanical and Electrical (AD/M&E). We propose to regrade four posts of Assistant Director of Water Supplies (ADWS) with a view to reflecting more accurately the job nature of these posts and selecting staff of the most appropriate discipline to take up these posts; and thus enhancing staff planning.

Separately, we have once considered putting the Water Science Division under the Mechanical & Electrical Branch so that the CCh if promoted to AD/M&E could still manage the Water Science Division. For this, we have specifically consulted the Waterworks Chemist (WC) grade members; and they have indicated clearly their preference to stay in the Development Branch so that they could maintain their relative independence from other operational branches (including the Mechanical & Electrical Branch). This helps protect the independency of the work of Water Science Division in the monitoring and control of quality of water supplies and to avoid influence by operation need.

We reiterate that the regrading of four ADWS posts to four Government Engineer (GE) posts and the retaining of an ADWS post exclusively for Mechanical Engineer (ME), Electrical Engineer (EE) and WC grade officers suit and reflect the current operational need of the five operational branches in WSD. At the same time, succession to the four GE posts in WSD responsible for civil engineering works as well as the GE posts in Works Group of Departments would become more optimum and desirable than the current setup. Moreover, after regrading of the directorate posts, the promotion ratio for the chief professionals of the ME/EE/WC grades could be preserved.

Development Bureau Water Supplies Department June 2017