For discussion on 4 December 2017

Legislative Council Panel on Housing

Testing of drinking water of public rental housing estates under the "Enhanced Water Quality Monitoring Programme" and the latest progress of the follow-up actions in respect of the "excess-lead-in-water" incident

Purpose

The Government announced the "Action Plan for Enhancing Drinking Water Safety in Hong Kong" (Action Plan) on 21 September 2017. The Action Plan, which aims to further safeguard the drinking water quality in Hong Kong, includes a territory-wide "Enhanced Water Quality Monitoring Programme" (Enhanced Programme) for public and private buildings. This paper updates Members on –

- (a) the arrangements for testing of drinking water in public rental housing (PRH) estates under the Enhanced Programme; and
- (b) the latest progress of the follow-up actions taken by the Hong Kong Housing Authority (HA) in respect of the "excess-lead-in-water" incident in 2015.

Background

2. After the "excess-lead-in-water" incident in 2015, the Government set up the "Task Force on Investigation of Excessive Lead Content in Drinking Water" and the "Commission of Inquiry into Excess Lead Found in Drinking Water" (COI), while the HA set up the "Review Committee on Quality Assurance Issues Relating to Fresh Water Supply of Public Housing Estates" (Review Committee), to investigate into the cause of the incident, review and strengthen the regulatory and monitoring systems in order to prevent the recurrence of similar incidents. Since the incident, the Water Supplies Department (WSD) has implemented a series of measures, including requiring the contractors to conduct water sampling tests for four heavy metals including lead upon completion of installation of inside service¹. During inspection of the inside service, the Water Authority (WA) also carries out lead content inspection for the solder joints, verifies and approves completed plumbing works with reference to a detailed checklist. HA has been complying with these requirements strictly. As for the HA, we have also fully implemented all the enhancement measures recommended by the Review Committee, ranging from contract specifications, delivery and verification of materials, monitoring during construction to testing upon completion. These measures have strengthened the monitoring of contractors and sub-contractors as well as the control and checking of materials, including soldering materials. COI also supports these enhancement measures.

Enhanced Programme

3. The Development Bureau (DEVB) appointed the International Expert Panel on Drinking Water Safety (IEP) in June 2016 to give advice on matters relating to drinking water safety. At the same time, WSD also engaged an expert consultant to conduct studies on the matter. Making reference to international experiences and practices as well as the recommendations of the COI, the Government has critically and holistically reviewed the current drinking water safety regime, and on the advice of the IEP, developed the Action Plan to further enhance the drinking water quality in Hong Kong. The press release on the Action Plan issued by DEVB on 21 September 2017 is at **Annex 1**. DEVB also set out details of the Action Plan in its paper submitted for discussion at the meeting of the Legislative Council (LegCo) Panel on Development on 28 November 2017 (LC Paper No. CB(1)235/17-18(07)). Details on the Action Plan as set out in the paper are extracted at **Annex 2** for Members' reference.

¹ WSD issued circular letters in September 2017 (effective from 15 October 2017) and October 2017 (effective from 15 November 2017) to update the new commissioning requirements for new plumbing works and plumbing works in occupied buildings respectively, stipulating that the parameters for the water sampling tests upon completion of works should include six heavy metals (lead, cadmium, chromium, nickel, copper and antimony).

Testing of drinking water of PRH estates under the Enhanced Programme

4. One of the important components of the Action Plan is the Enhanced Programme. Under the Enhanced Programme, WSD will collect random water samples annually from consumers' taps in around 670 public and private premises in Hong Kong. WSD will adopt a two-tier sampling protocol for testing of six metals that could be present in internal plumbing systems, viz. lead, nickel, chromium, cadmium, copper and antimony. Details are set out in **paragraphs 4-6 of Annex 2**. As the Enhanced Programme covers all public and private buildings in Hong Kong, the water quality of all PRH estates will also be subject to monitoring under the programme.

5. With regard to the suggestion of testing the drinking water in PRH estates again, the IEP has studied the water sampling test results taken for PRH estates in 2015 and considered that unaffected PRH estates had been effectively distinguished from the affected estates due to the large number of water sampling data collected and the use of a stringent criterion for classification of a PRH estate as an affected estate². The IEP considered that overall speaking, the risk of lead contamination in PRH estates was low, and the Enhanced Programme would cover all PRH estates. Nevertheless, given that pipes involving solder joints were in general used in post-2005 PRH developments, in order to put the minds of residents at ease, the IEP agreed that the Government could take additional water samples from these post-2005 PRH developments for testing of lead in conjunction with the Enhanced Programme if such developments were not selected for testing under the first year of the programme. The full remarks made by IEP member, Dr Chan Hon-fai, at the press conference on 21 September 2017 is at Annex 3 (only Chinese version is available) for Members' reference.

6. HA convened an informal meeting to discuss the Action Plan immediately after the Government's announcement at the press conference on 21 September 2017. HA fully supports the Action Plan and will work in coordination with the Government for the implementation of the Action Plan in PRH estates and the relevant follow-up actions. The press release issued by HA after the meeting is at **Annex 4**. Details of the arrangements for testing of drinking water of PRH estates are summarised as follows –

² Once a single unit was affected, the whole PRH estate would be classified as an affected estate.

- (a) WSD will invite randomly selected PRH premises to participate in the Enhanced Programme and will normally visit the premises to take samples two weeks after the invitation letters are issued. As participation in the programme is non-mandatory, WSD will only take water samples for testing upon obtaining consent from the occupier.
- (b) As stated in **paragraph 6 of Annex 2**, in case of exceedance, WSD will provide necessary advice and assistance to the affected household, including providing information on the related health risks, advising on possible mitigation measures and the follow-up actions, etc. HA will provide support to the affected tenants in accordance with WSD's recommendations as appropriate, including the provision of filters or bottled water, etc.
- (c) HA will also take other follow-up actions in accordance with WSD's recommendations as appropriate. For example, if WSD's initial investigation indicates the possibility that the exceedance may represent a systemic problem in the inside service of the building, HA will, as per the Government's advice, engage a consultant to conduct a detailed investigation.

7. The Enhanced Programme will commence by the end of 2017. It will continuously monitor the drinking water quality of all buildings across the territory, including PRH estates. WSD has launched a dedicated webpage on the Action Plan (www.wsd.gov.hk/en/actionplan) for the public to download leaflets and other relevant information.

Latest progress of the follow-up actions taken in respect of the "excess-lead-in-water" incident in 2015

8. Since the "excess-lead-in-water" incident, we have been reporting to the LegCo and the public the latest progress regarding the enhancement measures and follow-up actions taken by the HA, including the provision of relief measures to tenants (e.g. distribution of bottled water, provision of standpipes and temporary water points on each floor, and installation of water filters, etc.); the progress of rectification works in the 11 affected PRH developments; and the series of enhancement measures taken to enhance the quality assurance mechanism.

Rectification Works in the 11 Affected PRH Estates

9. HA's contractors started to replace the non-compliant pipes in the 11 affected PRH developments in March 2016. Works in the common areas were completed in Q2, 2017 and the contractors have started works inside flats since April 2017. Overall, the contractors have completed 40% of the works inside flats.

10. As works inside flats will unavoidably cause inconvenience to tenants (e.g. temporary suspension of water supply, mounting of gondolas on external walls, use of passenger lifts to convey materials during non-peak hours and use of some public space in the estate for workshops, etc.), HA has asked the contractors to minimise the nuisance and inconvenience as far as practicable. In order to keep the tenants informed of the detailed arrangements for works inside flats, HA has –

- (a) briefed the relevant Estate Management Advisory Committees (EMAC), District Councils (DC) and attended residents' forums, etc. to present the methods and arrangements for works inside flats and answer tenants' enquiries before commencement of works;
- (b) distributed newsletters to the tenants' mailboxes and posted notices in the lobbies of the affected estates to provide details of the works to be done (including the flow, scope and date of works, water suspension time, samples of workers' identification badges and uniform, etc.); and
- (c) required the contractors to continue to deploy ambassadors and maintain a hotline to answer tenants' enquiries.

11. HA has been working closely with the contractors and WA to deliberate and deal with issues which arise during works. We have also made arrangements in light of feedback from tenants, LegCo/DC/EMAC members and practical experiences.

12. HA has been closely monitoring the quality and progress of works. The WA has also been conducting interim inspections on the rectification works to make sure that they are in compliance with the requirements of replumbing works. When the works inside flats are completed, the contractors will conduct water sampling tests in accordance with WA's requirements. Subject to satisfactory water test results, form WWO46 Part V will be issued by WSD under the Waterworks Ordinance to certify completion, and HA will then remove the water filters and withdraw the temporary water supply (including temporary water points on each floor and standpipes) in stages. The temporary water supply measures will continue to be in force until the rectification works inside flats are completed.

13. Rectification works inside flats involve various complicated technical and enforcement issues. For example, there are some cases with extremely complex furnishings in which the pipes are inaccessible or concealed. For these cases, the contractors need to communicate with tenants to explore other feasible methods such as adopting alternative pipe routings. Some tenants have also expressed unwillingness in carrying out works inside their flats; some others have suggested having water tests in lieu of replacement of non-compliant pipes. As this involves the requirements under the Waterworks Ordinance, HA has been consulting WA and in the meantime, we will continue to persuade tenants to allow the contractors to carry out the works at their This process will take time and we will continue to monitor the convenience. The WA will follow up with these tenants at an appropriate juncture progress. and consider whether, and if so, what actions to be taken on a case-by-case basis.

14. HA will continue to monitor the quality and progress of the rectification works, minimise the inconvenience caused to tenants during the works and ensure that the works can be completed as soon as possible. We will also continue to keep LegCo and the public informed of the progress of works from time to time.

Enhancing the Quality Assurance Mechanism

15. As mentioned in paragraph 2 above, since the "excess-lead-in-water" incident, HA has implemented a series of enhancement

measures to strengthen its quality assurance system for plumbing installation works, ranging from contract specifications, delivery and verification of materials, monitoring during construction to testing upon completion.

16. As reported to this Panel in March 2017, apart from water quality, we have also taken further steps and completed in December 2016 a risk assessment exercise on about 2 300 building materials. We have evaluated the risk assessment results and developed corresponding risk treatment measures based on the present known risk levels. Major risk treatment measures for all materials were rolled in the third quarter of 2017 and have been applied to works projects. Some items which require further study or research and expert advice will be implemented in steps at appropriate time.

17. The risk treatment measures have been applied to the five building construction work stages, namely, "Sample Submission", "Purchasing", "Delivery", "Storage Control" and "Use (Installation)", so as to ensure that effective control measures are in place for every stage. Such measures include increasing the number of materials for verification checks at delivery stage, the frequency of sampling test, the number of times of inspection during installation and adding the requirements on random checking of materials at storage areas, etc.

18. At the same time, with a view to developing a coordinated approach on material control, we have consulted Hong Kong Construction Association Limited and jointly reviewed with the contractors on their current material checking and monitoring systems. We have required the contractors to –

- (a) develop a project specific material risk assessment system for their subcontractors and suppliers with reference to HA's system, and incorporate into their Quality Control System and Subcontractor Management Plan; and
- (b) appoint a third party to conduct annual audit on the Quality Control System for every HA project, and increase the frequency of compliance audits on materials by the contractors' in-house audit teams.

19. In addition, we have organised a series of promotion and training sessions, as well as a partnering workshop and charter signing with the contractors to secure their commitment.

20. Risk assessment is an on-going process and may evolve over time. We will review the quality control systems regularly to check and monitor whether the materials comply with the specifications, with a view to maintaining and improving the effectiveness of the system.

Transport and Housing Bureau November 2017

Press Releases

Government launches Action Plan for Enhancing Drinking Water Safety in Hong Kong (with photo/video)

The Government today (September 21) launched the Action Plan for Enhancing Drinking Water Safety in Hong Kong to further safeguard drinking water quality in Hong Kong through a multipronged approach.

After the incident of excess lead found in drinking water in 2015, relevant government bureaux and departments have spared no efforts in taking forward follow-up actions and implementing various improvement measures. The International Expert Panel on Drinking Water Safety (IEP) set up in June last year has been providing advice on issues regarding drinking water safety. After appointing expert consultants to study the experience and practices of drinking water safety in other countries and taking into account the advice of the IEP, the Development Bureau (DEVB) and the Water Supplies Department (WSD) have holistically reviewed the existing drinking water safety regime in Hong Kong and developed the Action Plan to safeguard the drinking water quality in Hong Kong.

The Action Plan comprises five components, namely "Drinking water standards and enhanced water quality monitoring programme", "Plumbing material control and commissioning requirements for new plumbing installations", "Water safety plans", "Water safety regulatory regime" and "Publicity and public education". It aims at further enhancing drinking water safety in Hong Kong in a comprehensive manner.

The WSD will enhance the existing water quality monitoring programme by collecting random water samples annually from consumers' drinking taps for testing. The first stage of the programme will test the existence of six metals, namely antimony, cadmium, chromium, copper, lead and nickel that could be present in internal plumbing systems. The collected data on local water quality will form the basis for assessing the appropriateness of adopting standards beyond the guidelines set by the World Health Organization. The enhanced programme is targeted to commence before the end of December.

As water quality from consumers' taps will be affected by the construction, subsequent operation and maintenance of the internal plumbing systems, the Action Plan also includes strengthening the regulatory control of plumbing materials; reviewing the legislation in order to explore the establishment of a registration regime for defining the roles and responsibilities of the related persons engaged in the design and construction of inside services; and tightening of the commissioning requirements for new plumbing installations. The Action Plan will also promote the implementation of water safety plans for buildings to property owners and property management agencies, to enable them to systematically assess and check the internal plumbing system of buildings for enhancing drinking water safety. The Government will also enhance publicity and public education on the safe use of water and review the drinking water safety regulatory regime in Hong Kong.

In order to raise public awareness of the Action Plan, the

WSD will organise briefing sessions later. Details will be announced in due course. The WSD is also launching a dedicated webpage on the Action Plan (www.wsd.gov.hk/en/actionplan) today for the public to download leaflets and relevant information. The WSD has set up a hotline (2824 5000, press 05 after language selection) for public enquiries about the Action Plan.

Ends/Thursday, September 21, 2017 Issued at HKT 15:45

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On 21 September 2017, the Government launched the Action Plan for Enhancing Drinking Water Safety in Hong Kong (the Action Plan) which comprises the following components in order to restore public confidence in drinking water safety-

- establishing drinking water standards and implementing an enhanced water quality monitoring programme (the Enhanced Programme);
- (ii) tightening up plumbing material control and commissioning requirements for new plumbing installations;
- (iii) promoting Water Safety Plan (WSP) for Buildings;
- (iv) enhancing publicity and public education; and
- (v) developing a drinking water safety regulatory regime.

2. The Water Supplies Department (WSD) has been supplying drinking water in full compliance with the World Health Organization Guidelines for Drinking-water Quality (WHO Guidelines) up to the connection points to the consumers (connection points). With reference to overseas practices and the advice from the International Expert Panel on Drinking Water Safety (IEP)¹ appointed by the Secretary for Development (SDEV), the Works Branch of the Development Bureau (DEVB(WB)) and WSD have formulated the Action Plan which is detailed in the ensuing paragraphs.

(i) Establishing drinking water standards and implementing the Enhanced Programme

3. Hong Kong has all along been making reference to the Guideline Values (GVs)/Provisional Guideline Values (PGVs) of the WHO Guidelines in monitoring the quality of drinking water up to the connection points. In response to the recommendations of the Commission of Inquiry into Excess Lead Found in Drinking Water (CoI) on the establishment of the Hong Kong Drinking Water Standards, WSD has engaged an expert consultant to carry out a comprehensive review on drinking water quality standards and methodologies of setting these standards in overseas jurisdictions².

Annex 2

¹ The IEP was appointed by the SDEV in June 2016 to advise SDEV on the proposal of DEVB/WSD on drinking water safety.

² They include two international organisations (viz. World Health Organization (WHO) and European Union (EU)) and seven overseas nations (viz. the United Kingdom (UK), United States of America (USA), Canada, Australia, New Zealand, Singapore and Japan).

In view of the public concern over possible metal contamination in 4. drinking water, the expert consultant has focused on the 12 metal parameters (including lead) in the WHO Guidelines in the first stage of the review study³. Having taken into account the consultant's findings and IEP's advice, WHO's GVs/ PGV for the 12 metal parameters, including 10µg/Litre(L) for lead ⁴ are recommended to be adopted as the drinking water standards in Hong Kong. Nonetheless, IEP advised that a review on the aforesaid standards should be carried out when new information is available from WHO's revision of its Guidelines or when sufficient local data is available, say in three to five years' time, with a view to establishing a set of drinking water standards tailored for Hong Kong, including the appropriateness to adopt standards beyond WHO Guidelines for certain parameters. Against this, IEP advised that the current water quality monitoring programme⁵ of WSD be enhanced by collecting random water samples from consumers' drinking taps for testing six metals, viz. lead, cadmium, chromium, nickel, copper, and antimony, which could be present in the internal plumbing systems. The collection and testing of water samples will commence by the end of 2017. Further, we will continue to complete the remaining stage of the review of the WHO parameters and seek IEP's endorsement by the end of 2018; and in the interim the IEP has recommended that the corresponding WHO's GVs/PGVs should also be adopted as drinking water standards for compliance monitoring.

5. With reference to overseas practices⁶, the number of water samples should be calculated according to the population of the 18 district council districts. Accordingly, about 670^7 premises will be randomly selected from over 2.9 million water accounts in the territory each year under the Enhanced Programme.

6. In regard to the water sampling protocol, the IEP has endorsed the adoption of a two-tier sampling protocol⁸ for the six metal parameters involving the testing of stagnant water, namely (i) Tier $1 - Random Day Time (RDT)^9$ sampling

³ The next stage of the review will be on the non-metal parameters in the WHO Guidelines.

⁴ As far as lead is concerned, there is no other jurisdictions currently adopting an enforcement standard of lead lower than the PGV of 10µg/Litre under the WHO Guidelines and there is also the possible contribution of compliant copper alloy fittings to lead in drinking water, and hence 10µg/L for lead is adopted. As for the other 11 metal parameters, in view of the precautionary approach adopted by the WHO in the derivation of their GVs/ PGVs, it is recommended to adopt these values as standards at this stage. The standards for the six metals to be tested are: Lead: 10µg/L; Antimony: 20µg/L; Cadmium: 3µg/L; Chromium:50µg/L; Copper: 2 000µg/L and Nickel:70µg/L.

⁵ At present, WSD has been taking water samples for monitoring from its waterworks including water treatment works, service reservoirs and from publicly accessible places such as shopping centres, clinics, community facilities, sports grounds, markets, government offices, estate management offices, etc.

⁶ The sampling rates in UK are: one sample for population < 100; four samples for population between 100 and 4 999; and eight samples for population between 5 000 and 100 000.

⁷ Based on the latest population data published by the Census and Statistics Department in February 2017.

⁸ Taking into account the findings of the review of the water sampling protocols adopted in two international organisations (viz. WHO and EU) and several overseas nations (viz. UK, Germany, United States of America (USA), Canada, Australia, New Zealand, Singapore and Japan) for water quality monitoring.

⁹ For RDT sampling, a 1L unflushed sample will be taken at random during normal working hours in daytime from a drinking water tap of consumer. No flushing will be carried out by the sampler before

for determining the metal exposure of consumers to the six metals; and (ii) Tier 2 - 30-minute stagnation (30MS) sampling¹⁰ for verification of exceedance found in the Tier 1 water sample, which will be tested in case of exceedance being found in the Tier 1 water sample¹¹. If there is no similar exceedance in the Tier 2 water sample, there should be no metal contamination in the plumbing installation of the concerned premises. If exceedance is found in both Tier 1 and Tier 2 water samples in a premises, WSD will provide necessary advice and assistance to the affected premises.¹²

(ii) Tightening up plumbing material control and commissioning requirements for new plumbing installations

7. As water quality from consumers' taps will be affected by their internal plumbing systems (including the materials used), the Action Plan includes strengthening the regulatory control of internal plumbing systems. On tightening up of plumbing material control and the management and training of licensed plumbers, WSD has implemented a number of measures since 2015. Further, DEVB and WSD have commenced a legislative review in regard to the parties responsible for design, construction and maintenance of plumbing installations.

8. On the commissioning requirements for new plumbing installations, WSD has engaged the University of Hong Kong to develop a systematic flushing protocol to ensure adequately flushing of new plumbing installations (systematic flushing protocol) to reduce metal leaching from new pipes and fittings before the new plumbing installations are put into use, as new pipes and fittings will have higher metal leaching rate. Progressive steps have been taken to tighten up the commissioning requirements for new plumbing installations in stages : (a) starting with the mandatory requirement in July 2017 for applying the systematic flushing protocol to all newly installed inside services after obtaining approval for water supply and before occupation; (b) with the next stage of implementation in October 2017 involving the taking of a 6-hour stagnation (6HS) water sampling test after the flushing; and (c) finally making the satisfactory 6HS water sampling test result a condition for approval of effecting the water supply in new buildings in January

taking the water sample whilst the internal plumbing system may or may not have been used by the consumer before the sampling. Therefore, RDT samples involve taking unflushed samples with various stagnation times. The 4th Edition incorporating the 1st Addendum of the World Health Organization Guidelines for Drinking-water Quality indicates that Random Day Time samples reflect most truly the water that the consumer drinks.

¹⁰ For 30MS sampling, the tap should first be flushed for 5 minutes and then stagnated for 30 minutes before a 1-L unflushed sample is taken.

¹¹ Tier-2 30MS water sample will not be tested if there is no exceedance found in the Tier-1 RDT water sample.

¹² In case of exceedance of the respective standard of the parameters being found in the 2-Tier water samples, WSD will notify the affected parties of the test results, provide information on the related health risks, and advise on possible mitigation measures and the follow-up actions. WSD will publish the water quality test results regularly.

2018. In line with the Enhanced Programme, all six metals have been included in the water sampling test for new plumbing installations subject to review in due course when more test results are available. We will also review the aforesaid measures and consider if further requirements are necessary. We are also conducting a holistic review on the roles and responsibilities of the contractors, licensed plumbers and workers, including exploring the introduction of a registration regime for plumbing contractors in the Waterworks Ordinance (WWO) to undertake more complex and large-scale plumbing works. The amendments to the WWO will be carried out in phases.

(iii) Promoting WSP for Buildings

9. WSD has developed its own WSP following the WHO Guidelines to ensure drinking water quality from source to distribution. In regard to the inside services, WSD has spelt out in the WSP its regulatory, monitoring and advisory role. The IEP acknowledged that WSD has generally followed the methodology advocated by the WHO in its development of WSP and considered that WSD should be responsible for the water supply chain from source to distribution up to the connection point designated as "WSP for WSD", whilst building owners should be responsible for the inside services (i.e. beyond the connection point) designated as "WSP for Buildings".

10. Notwithstanding this, WSD has engaged an expert consultant to review the WSP for WSD and provide advice on the development and promotion of WSP for Buildings. With reference to overseas experience and advice of the consultant on WSP for WSD, WSD has enhanced its WSP followed by establishing and implementing in July 2017 the Drinking Water Quality Management System (DWQMS) that has embraced the enhanced WSP. In addition, WSD will promote the WSP for Buildings to building owners and property management agents as water quality might deteriorate within buildings due to, for instance, water stagnation at dead ends of the inside services, ingress of foreign materials to the water tanks or lack of proper maintenance of the internal plumbing system. WSP for Buildings will provide a systematic and effective management tool for building owners and management agents to properly maintain and clean their plumbing systems and play a vital role in safeguarding drinking water quality in Hong Kong.

11. To assist building owners and property management agents in establishing and implementing WSP for their buildings on a voluntary basis, WSD has developed guidelines and templates for their reference. The guidelines and templates for general buildings and schools were promulgated in conjunction with the announcement of the Action Plan on 21 September 2017 after successful trials at several buildings and schools. WSD will continue to work on other specific buildings such as elderly homes and promulgate the corresponding templates in due course. In this regard, WSD has launched the Quality Water Supply Scheme for

Buildings – Fresh Water (Management System) (QMS) in November 2017 and will continue to reach out to stakeholders to encourage development and implementation of WSP for Buildings to safeguard the quality of drinking water in buildings. QMS has combined the WSP for Buildings and the existing voluntary Quality Water Supply Scheme for Buildings – Fresh Water (Plus) (Q-Plus); and WSD will award certificates to successful buildings to recognise the responsible parties' efforts in enhancing water safety.

(iv) Enhancing publicity and public education

12. The implementation of the Action Plan, notably the Enhanced Programme and WSP for Buildings, will require public participation and endorsement of building owners and property management agents. In addition, suitable advice should also be tendered to the public, including flushing before using newly installed plumbing systems, adopting a good habit of flushing drinking water taps which have not been used for a few hours or more, and purchasing WSD approved taps with a "General Acceptance" label.

13. After the public announcement of the Action Plan on 21 September 2017, WSD has progressively rolled out the publicity and public education on the safe use of water through various channels such as dedicated webpages, leaflets, posters, television and radio Announcement of Public Interest (API), public seminars and briefings to different users/stakeholder groups including property management agents and operators of specific premises, such as kindergartens, welfare units, schools, etc. WSD briefed the Chairmen and Vice-Chairmen of the District Councils the Action Plan on 13 October 2017. In October and November 2017, WSD held several seminars for the public and professional bodies raise awareness of the Action Plan to their members, and organised some discussion forums with operators of specific premises to promote the Enhanced Programme and water use tips.

14. On the promotion of WSP for Buildings, the focus will be to explain the key features of the WSP and how its implementation can bring about enhancement of the drinking water safety in the participating buildings, and to highlight that technical advice and assistance will be provided by WSD to facilitate implementation. WSD held some briefing sessions on QMS in November 2017 in this regard and will continue the promotion work in due course.

(v) Setting up a drinking water safety regulatory regime

15. On the front of developing a drinking water safety regime in Hong Kong, DEVB(WB) engaged consultants to study the water safety regimes of leading jurisdictions as well as to explore a suitable control framework for Hong Kong. DEVB has also set up an Inter-bureau/departmental Working Group on

Water Safety Issues¹³ which has reviewed the studies and considered that an office independent from WSD together with a regulatory mechanism should be established to develop drinking water quality objectives, standards, and regulatory and monitoring controls. While further studies will be continued to explore the scope and details of the water safety regulatory regime, a dedicated team will be set up in DEVB(WB) to monitor the performance of WSD on drinking water safety. Furthermore, DEVB(WB) will set up a Drinking Water Safety Advisory Committee with members comprising academics, medical experts, etc. to give advice on various water safety issues. With the assistance of the Advisory Committee, DEVB(WB) will draw up a suitable drinking water safety regulatory regime.

¹³ The work of the Working Group on Water Safety was completed in September 2017.

食水安全國際專家小組成員在提升香港食水安全行動計劃記者會發言全文(只有 中文)

以下是食水安全國際專家小組成員陳漢輝博士今日(九月二十一日)在提升 香港食水安全行動計劃記者會發言全文:

各位傳媒朋友,你們好!

二o一六年中發展局委任了一個五人(食水安全)國際專家小組,成員包括 澳洲一位世衞(世界衞生組織)專家、英國的食水監管局一位前總監、北美的一 位食水安全專家和香港一位醫學教授,以及我本人。我今日好高興以成員的身分 在此發言。

過去一年多,小組和發展局及水務署,不斷商討水安全及相關的議題,亦分 享很多國際的經驗及做法。總括來說,我們認為香港的飲用水水質與很多先進國 家的水平相若。我們經考慮了香港的實際環境後,認為現時落實行動計劃是合適 的,因為我們相信這個計劃是保障香港飲用水安全的一個重要里程碑。長遠來說, 我們認為香港政府的努力及承諾可以提升香港人對飲用水安全的意識及恢復他 們的信心。我亦想對發展局和水務署在多月來做了大量工作,最後落實這個行動 計劃,表示肯定。

就行動計劃的具體內容,我想重點提出我們幾位專家的幾個觀點:

(一) 在飲用水標準方面,我們認為世衞現時建議的標準切實可行,並適用於 香港。香港未來三至五年需要透過優化水質監測計劃收集本地數據,再檢討這個 標準是否需要修正,或是否有空間可以提升。

(二) 在規程方面,我們認為現時將取水的位置伸延涵蓋到用戶食水水龍頭, 是一個很重要的改善措施,因為既能收集有用的數據,亦可以增強市民對飲用水 的信心。在規程方面,我們同意政府將來採納一個兩級制的規程來檢視水中的金 屬,這其實也是歐盟及英國普遍採用的規程,而 RDT (Random Day Time [Sampling])亦是世衞今年建議採用的做法。

(三) 二o一五年水務署根據 ISO 5667-P5 的指引,採用兩分鐘沖透取樣規程 來檢查公共屋邨食水受鉛污染的風險,我們小組已詳細研究過所有的驗水結果, 包括獨立調查委員會委任李行偉教授(進行)的結果,我們認為當年政府收集了 大量的數據並採用了一個非常嚴緊的標準,有效地區分受鉛污染及不受污染的屋 邨。整體而言,我們認為公屋受鉛污染的風險偏低,但為了釋除部分居民的疑慮, 我們同意為二00五年或之後落成的公屋,如在首年沒有被挑選參加驗水計劃, 會額外在這些屋邨抽取水樣本以同一規程測試鉛含量。

(四) 在驗收新建成樓宇供水系統方面,我們贊同水務署用比較嚴格的要求, 即分階段引入系統性的沖洗方法及檢驗六小時靜水樣本。雖然這個要求是比較保 守,但對於新建成的樓宇來說,是可行的,並且能夠保障居民飲用水的安全,以 及減低日後有同類金屬污染的風險。

最後,我相信行動計劃並不是一個終結,而是一個開始。國際專家小組亦會 繼續為發展局提供意見,以制定一套適合香港的水質規管及監測制度。我今日的 發言到此,多謝各位!

完

二0一七年九月二十一日

Press Releases

Housing Authority convenes informal meeting to discuss Action Plan for Enhancing Drinking Water Safety in Hong Kong

The following is issued on behalf of the Hong Kong Housing Authority:

The Government announced the Action Plan for Enhancing Drinking Water Safety in Hong Kong today (September 21), which aims to further safeguard the drinking water quality in public and private buildings. The Hong Kong Housing Authority (HA) convened an informal meeting shortly after the announcement to discuss the Action Plan. Government representatives were invited to brief Members on the details. The HA Members fully supported the implementation of the Government's Action Plan to enhance drinking water safety. The HA will work in co-ordination with the Government for the implementation of the Action Plan in PRH estates and the relevant follow-up actions.

Representatives from the Water Supplies Department (WSD) briefed Members on the main components of the Action Plan at the meeting, including the territory-wide "Drinking Water Standards" and "Enhanced Water Quality Monitoring Programme" (Enhanced Programme). Members noted that the WSD would collect water samples annually from premises in Hong Kong, including public rental housing (PRH) estates, in accordance with the new sampling protocol, for the testing of six metals, namely lead, nickel, chromium, cadmium, copper and antimony. In order to put the minds of residents at ease, international expert panel established by the Development Bureau recommended that additional water samples from post-2005 PRH estates for testing of lead would be taken in conjunction with the implementation of the Enhanced Programme in the first year.

Representatives from the WSD also introduced other components of the Action Plan, including strengthening regulatory control for inside service, and developing a set of guidelines and templates for promoting the implementation of a Water Safety Plan (WSP) for buildings.

Representatives from the Housing Department (HD) updated Members on the latest developments regarding the follow-up actions arising from the "excess lead in water incident" in 2015, including enhancing the HA's quality assurance mechanism, and the progress of rectification works in the 11 affected PRH developments. The HD also explained the implementation arrangements of the Action Plan, in particular the Enhanced Programme, in PRH estates.

The Secretary for Transport and Housing and Chairman of the HA, Mr Frank Chan Fan, said at the meeting, "In respect of the new administrative requirements under the Action Plan, such as new commissioning requirements, the HA will, as usual, continue to strictly comply with the Water Authority's requirements and procedures. Regarding components in which participation is voluntary, such as the Enhanced Programme, the HA, as the owner, welcomes the WSD to take water samples from PRH estates. However, as the programme is not mandatory, PRH tenants can choose whether or not to participate. The WSD will seek consent from tenants before taking drinking water samples for testing. As for the WSP for buildings, we also support its implementation in PRH estates."

The WSD said that the various components under the Action Plan will be rolled out in stages. Among them, the Enhanced Programme is expected to be launched in December this year. Mr Chan said that the HA would keep in view the implementation and operation of the Action Plan in PRH estates, and would continue to keep the public informed of the progress of rectification works in the 11 affected PRH estates and the latest developments under the Action Plan through various channels.

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