

# 立法會 *Legislative Council*

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## **Panel on Welfare Services**

### **Background brief prepared by the Legislative Council Secretariat for the meeting on 9 November 2015**

#### **Measures to address the situation of lead in drinking water in child care centres and residential care homes**

#### **Purpose**

This paper summarizes past relevant discussions by the Council and its committees relating to measures adopted by the Administration to address the situation of lead in drinking water in child care centres and residential care homes.

#### **Background**

2. Between April and June 2015, the Democratic Party ("DP") collected drinking water samples from 13 public and private buildings in Kowloon West to test their contents of heavy metals including lead. According to the test results announced by DP on 5 July 2015, four water samples taken from Kai Ching Estate in Kowloon City contained lead that exceeded the World Health Organization ("WHO")'s provisional guideline value<sup>1</sup> of not more than 10 micrograms per litre for lead ("the WHO value").

3. Between 9 to 11 July 2015, the Administration announced that the lead content of seven water samples from Kai Ching Estate exceeded the WHO value, and that lead was found in two samples of solder used on water pipe joints. On 13 July 2015, water samples were taken from four other public rental housing ("PRH") estates<sup>2</sup> where the fresh water

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<sup>1</sup> As defined under the WHO's Guidelines for Drinking-water Quality published in 2011, a health-based guideline value represents the concentration of a constituent that does not exceed tolerable risk to the health of the consumer over a lifetime of consumption. For the contaminant of lead, the guideline value is designated as provisional because calculated guideline value is below the achievable quantification level as well as the level that can be achieved through practical treatment methods, source control, etc.

<sup>2</sup> The four PRH estates were Lung Yat Estate in Tuen Mun, Cheung Sha Wan Estate, Shui Chuen O Estate in Shatin, and Kwai Luen Estate in Kwai Shing Circuit.

plumbing systems were installed by the same licensed plumber. The lead content of five water samples from Kwai Luen Estate (Phase 2) and one sample from a vacated unit of Shui Chuen O Estate were found to be above the WHO value.

#### Measures taken in response to the incidents

4. According to the Administration, a number of measures have been taken to address the incident concerning excess lead found in the drinking water samples collected from PRH estates. The Housing Department had asked the main contractors concerned to take necessary actions to remedy the situation, including extending connection pipes from the roof-top water tanks to each floor of the building, and installing lead-reducing water filters for affected tenants. The Administration announced on 24 September 2015 that systematic water sampling tests for PRH estates completed in or after 2005 had been completed. The Administration was conducting water sampling tests for the 143 PRH estates completed before 2005 and aimed to complete the tests before end-2015 by batches.

5. To ease the wide public concerns over the health effects<sup>3</sup> arising from long-term exposure to lead found in drinking water, the Department of Health ("DH") had provided free blood tests for the more easily affected tenant groups, namely infants, young children under six years of age (adjusted to be children aged below eight on 3 August 2015), pregnant women and lactating women. DH also developed care plan for tenants whose blood lead level exceeding the reference value and made special arrangements for children whose blood lead level had exceeded the reference value to receive development assessment at the Child Assessment Centres of DH.

#### Investigation into the incidents

6. The Hong Kong Housing Authority had formed a Review Committee<sup>4</sup> to review the quality assurance issues relating to fresh water supply of PRH estates. The Development Bureau had established a Task

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<sup>3</sup> According to the Centre for Health Protection under DH, significant exposure to lead might result in neurodevelopmental effects, anaemia, high blood pressure, gastrointestinal symptoms, impaired renal function, neurological impairment, impaired fertility and adverse pregnancy outcomes when it has accumulated in large amounts in the body.

<sup>4</sup> The terms of reference of the Review Committee on Quality Assurance Issues Relating to Lead in Fresh Water of Public Housing Estates are (a) to comprehensively review the present arrangements for quality control and monitoring in relation to the installation of fresh water supply system in PRH estates; (b) in the process of (a), to critically review various aspects of quality inspection relating to materials used (including prefabricated components), quality inspection and works supervision at different stages of construction; and (c) to report findings to the Hong Kong Housing Authority and recommend any improvement in procedures/guidelines and follow-up actions as necessary.

Force<sup>5</sup> in July 2015 to investigate the incidents. The Review Committee and the Task Force had released the interim findings<sup>6</sup> and the final investigation report<sup>7</sup> on 6 October and 31 October 2015 respectively.

7. In addition to the Review Committee and the Task Force, the Chief Executive ("CE") in Council set up the Commission of Inquiry into Excess Lead Found in Drinking Water ("CoI") under the Commissions of Inquiry Ordinance (Cap. 86) on 13 August 2015. CoI is tasked to (a) ascertain the causes of excess lead found in drinking water in PRH developments; (b) review and evaluate the adequacy of the present regulatory and monitoring system in respect of drinking water in Hong Kong; and (c) make recommendations with regard to the safety of drinking water in Hong Kong. CoI is expected to report to CE within nine months from the date of appointment.

## **Deliberations by Members**

### Measures taken for lead in drinking water in welfare facilities

8. Some Members expressed concern about whether the Administration would take specific measures for child care centres and residential care homes in response to the incident of lead in drinking water. A question was raised at the Council meeting of 28 October 2015 on whether the Social Welfare Department ("SWD") would deploy personnel to conduct water sampling tests for various types of residential care homes for the elderly ("RCHEs") so as to ensure the safety of the drinking water for consumption by their long stayers.

9. The Administration advised that having regard to the views of professional government departments, priority should be given to the more easily affected group, i.e. children aged below six. In this connection, the Administration accorded priority to conduct water sampling tests for welfare units serving children aged below six who had to stay in the units for long hours and consumed drinking water in the units. With the assistance of the Water Supplies Department ("WSD"), SWD had arranged water sampling tests to be conducted by phases commencing on 5 October 2015 for about 200 welfare units. These welfare units included

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<sup>5</sup> The Task Force is established to ascertain the causes of the recent incidents leading to presence of lead in water drawn by households and to recommend measures to prevent recurrence of similar incidents in future; and follow up on a recent case of Legionnaires' disease in Kai Ching Estate.

<sup>6</sup> The interim findings are available at the following website:  
(<http://www.housingauthority.gov.hk/en/about-us/news-centre/press-releases/report.html>).

<sup>7</sup> The final investigation report is available at the following website:  
[www.devb.gov.hk/filemanager/en/Content\\_3/TF\\_Final\\_Report.pdf](http://www.devb.gov.hk/filemanager/en/Content_3/TF_Final_Report.pdf)

day and residential child care centres, day child care services, children's homes, small group homes and day and residential special child care centres. If the test results indicated excess lead in water samples, SWD would inform DH immediately for arranging blood lead testing for children, pregnant and lactating staff of the affected welfare units. Test results of water samples involving 55 welfare service units released by SWD (up to 30 October 2015) are in **Appendix I**.

10. The Administration further advised that SWD had provided water filters for lead reduction for 13 welfare units located in government premises completed in 2005 or after and serving children aged below six who had to stay in the units for long hours and consumed drinking water in the units. SWD had also assisted, via the Government Logistics Department, about 200 other subvented welfare units (such as child care centres, residential care units and day care units) in ordering water filters through bulk purchase. On 28 August and 30 September 2015, SWD provided all welfare units (including child care centres and RCHEs) with the health advice about reducing lead exposure from CHP and WSD's advice on the installation and use of wall-mounted kettles respectively.

11. According to the Administration, WSD had deployed extra manpower for taking water samples from various facilities and procured additional testing equipment. The Government Laboratory would continue to deploy manpower for testing lead content in water samples and carrying out the rapid test of solder joints suspected to contain lead. In addition, the Hospital Authority had been working hard to increase the blood taking and testing capacity as far as possible.

### Motion

12. At its meeting of 28 October 2015, the Council passed a motion urging the Administration to, inter alia, immediately legislate for the safety of drinking water, so as to ensure that Hong Kong people were able to consume safe and reliable drinking water; in order to restore people's confidence in the safety of drinking water in the short run and compensate the affected PRH tenants.

### **Relevant papers**

13. A list of the relevant papers on the Legislative Council website is in **Appendix II**.

### Test Results of Water Samples Taken from Welfare Service Units

The Government is now taking drinking water samples from welfare units serving children aged below six who have to stay in the units for long hours and consume drinking water in the units by batches to ascertain whether the lead content in the drinking water exceeds the Provisional Guideline Value (GV) at 10µg/L recommended in World Health Organization (WHO)'s Guidelines for Drinking-water Quality. The Social Welfare Department will release the results after completion of the testing of each batch of water samples.

#### (Results released up to 29 October 2015, involving 55 welfare units in total)

- I. Water samples with lead content exceeding the Provisional GV recommended in WHO's Guidelines for Drinking-water Quality

	Name of Welfare Unit	District	Number of Water Samples Taken	Number of Water Samples Exceeding WHO's Provisional GV
-	-	-	-	-

- II. Water samples with lead content meeting the Provisional GV recommended in WHO's Guidelines for Drinking-water Quality

	Name of Welfare Unit	District	Number of Water Samples Taken
1	Po Leung Kuk Babies Section	Wan Chai	4
2	Po Leung Kuk Kinder Section	Wan Chai	4
3	Po Leung Kuk Children Section	Wan Chai	4
4	Po Leung Kuk New Comers' Ward	Wan Chai	2
5	Mother's Choice Child Care Home	Central & Western	3
6	Mother's Choice Wee Care Home	Central & Western	3
7	Hong Kong Society for the Protection of Children Children's Residential Home	Yau Tsim Mong	3
8	Yan Chai Hospital Law's Foundation Child Care Centre cum Hostel	Tsuen Wan	2
9	Hong Chi Pinehill Pre-school Centre	Tai Po	1
10	Hong Kong Society for the Protection of Children Jessie Tam Day Creche	Central & Western	3

11	Hong Kong Society for the Protection of Children SIA Shaukiwan Day Creche	Eastern	4
12	Hong Kong Society for the Protection of Children Esther Lee Day Creche	North	2
13	Hong Kong Society for the Protection of Children William Grimsdale Day Creche	Kowloon City	2
14	Hong Kong Society for the Protection of Children Air Cargo Community Day Creche	Yau Tsim Mong	3
15	Po Leung Kuk Mok Hing Yiu Creche	Wan Chai	2
16	Hong Kong Sheng Kung Hui Lady Macle hose Centre Joyful Children World	Kwai Tsing	1
17	Yuen Long Rhenish Day Creche	Yuen Long	2
18	Cannan Nursery (Central)	Central & Western	2
19	Cannan Nursery (Siu Sai Wan)	Eastern	2
20	Cannan Nursery (Whampoa Garden)	Kowloon City	2
21	Cannan Nursery (Kowloon Tong)	Kowloon City	2
22	Lingnan Day Nursery (Siu Sai Wan)	Eastern	1
23	Good Time International Play School (Choi Po Sin)	Wong Tai Sin	2
24	Parkview - Rhine Garden International Nursery	Tsuen Wan	2
25	Tung Wah Group of Hospitals Mr and Mrs Liu Lit Mo Child Development Centre	Yuen Long	2
26	Hong Kong Christian Service Cheung Wah Special Child Care Centre	North	2
27	Hong Kong Christian Service Morrison Hill Child Development Centre	Wan Chai	3
28	The Neighbourhood Advice-Action Council Child Enlightenment Centre	Sha Tin	2

29	The Neighbourhood Advice-Action Council Chan Yin Chuen Child Enrichment Centre	Wong Tai Sin	2
30	The HK Council of the Church of Christ in China Tuen Mun Special Child Care Centre	Tuen Mun	3
31	The Hong Kong Society for the Deaf Bradbury Child Care Centre	Kowloon City	1
32	Heep Hong Society Mary Wong Centre	Kwun Tong	2
33	Heep Hong Society Cheung Sha Wan Centre	Sham Shui Po	2
34	Heep Hong Society Hoi Fu Child Care Centre	Yau Tsim Mong	1
35	Heep Hong Society Tung Chung Centre	Islands	1
36	Po Leung Kuk New Comers' Ward Annex	Sha Tin	2
37	SAHK Apleichau Pre-school Centre	Southern	3
38	SAHK Jockey Club Marion Fang Conductive Learning Centre	Wong Tai Sin	2
39	International Social Service – Hong Kong Branch Ming Tak (Integrated) Small Group Home	Eastern	2
40	International Social Service – Hong Kong Branch Mo Tak (Integrated) Small Group Home	Eastern	2
41	International Social Service – Hong Kong Branch Yin Tak (Integrated) Small Group Home	Eastern	2
42	Sheng Kung Hui St. Christopher's Home Peace Small Group Home	Eastern	2
43	Sheng Kung Hui St. Christopher's Home Faith Small Group Home	Eastern	2
44	Sheng Kung Hui St. Christopher's Home Truth Small Group Home	Eastern	2
45	Sheng Kung Hui St. Christopher's Home Salvation Small Group Home	Eastern	2

46	Sheng Kung Hui St. Christopher's Home Holy Spirit Small Group Home	Eastern	2
47	Sheng Kung Hui St. Christopher's Home Righteousness Small Group Home	Eastern	1
48	Tung Wah Group of Hospitals Lok Sze (Integrated) Small Group Home	Eastern	1
49	Tung Wah Group of Hospitals Lok Yin (Integrated) Small Group Home	Eastern	1
50	Tung Wah Group of Hospitals Yan Sin Small Group Home	Eastern	1
51	Tung Wah Group of Hospitals Yan Yuet Small Group Home	Eastern	1
52	Tung Wah Group of Hospitals Yan Hei Small Group Home	Eastern	1
53	Yan Chai Hospital No.1 Small Group Home	Eastern	1
54	Yan Chai Hospital No.2 Small Group Home	Eastern	1
55	Yan Chai Hospital No.3 Small Group Home	Eastern	1

Remark: The shaded area is updated on 29 October 2015.

Source: The official website of the Social Welfare Department  
(<http://www.swd.gov.hk/doc/whatsnew/201510/testwater-e.pdf>)

## Appendix II

### Relevant papers on measures to address the situation of lead in drinking water in child care centres and residential care homes

Committee	Date of meeting	Paper
Panel on Housing	22 July 2015 (Item I)	<a href="#">Agenda</a> <a href="#">Minutes</a>
Panel on Health Services	24 August 2015 (Item I)	<a href="#">Agenda</a>
House Committee	1 September 2015 (Item I)	<a href="#">Agenda</a> <a href="#">Verbatim record of proceedings (Chinese version only)</a>
House Committee	8 October 2015 (Item I)	<a href="#">Agenda</a>
Panel on Welfare Services	15 October 2015 (Item III)	<a href="#">Agenda</a>
Legislative Council	28 October 2015 (Question no. 16 & Members' motion no. 4)	<a href="#">Agenda</a>
Panel on Housing	2 November 2015 (Item IV)	<a href="#">Agenda</a>