#### DRINKING WATER SAFETY ADVISORY COMMITTEE

# Annual Water Quality Statistics of the Enhanced Water Quality Monitoring Programme in 2023

#### **PURPOSE**

This Paper reports the annual water quality statistics of the Enhanced Water Quality Monitoring Programme ("Enhanced Programme") in 2023 and the associated observations.

#### **BACKGROUND**

- 2. The Water Supplies Department ("WSD") launched the Enhanced Programme in December 2017, as one of the five components of the Action Plan for Enhancing Drinking Water Safety in Hong Kong promulgated in September 2017. The Enhanced Programme currently monitors the concentration of six metals, viz. antimony, cadmium, chromium, copper, lead and nickel, as well as residual chlorine and *Escherichia coli* ("E. coli") in drinking water at consumers' taps of randomly selected premises. The Enhanced Programme also serves to collect local drinking water quality data for review of the standard values of the six metals in the Hong Kong Drinking Water Standards ("HKDWS").
- 3. The monitoring of six metals adopts the following two-tier sampling protocol: -

#### Tier 1 – Random Day Time ("RDT") sampling

The purpose is to monitor the water quality in respect of the six metals. An unflushed sample is randomly collected during daytime.

#### Tier 2 - 30-minute stagnation ("30MS") sampling

The purpose is to verify the metal exposure of consumers in case exceedance is found in the Tier 1 RDT sample. The tap is first flushed for five minutes and then stagnated for 30 minutes. After stagnation, an unflushed sample is collected.

- 4. After collecting the samples for testing the six metals, the tap is flushed for at least two minutes and a sample is collected for testing residual chlorine. The tap is then disinfected and further flushed for at least two minutes, and a sample is collected afterwards for testing *E. coli*.
- 5. In 2023, the WSD continued to engage an independent consultant to select premises randomly from all water accounts in the 18 district council ("DC") districts. The number of premises to be selected from each DC district was determined based on the population therein and a sampling rate of eight premises per 5 000 to 100 000 people. Drinking water samples were collected from 661 randomly selected premises in 2023.

#### **MONITORING RESULTS IN 2023**

6. The statistics of the test results of the water samples collected in 2023 under the Enhanced Programme is summarised in Table 1 below.

Table 1: Statistics of Monitoring Results<sup>#</sup> in 2023

	Minimum	Maximum	Average	95 <sup>th</sup> percentile	Standard value in HKDWS	Compliance with HKDWS*
Antimony (µg/L)	<1	<1	<1	<1	≤20	✓
Cadmium (µg/L)	<1	<1	<1	<1	≤3	✓
Chromium (µg/L)	<1	<1	<1	<1	≤50	✓
Copper (µg/L)	<3	610	20	60	≤2 000	✓
Lead (µg/L)	<1	23	<1	1	≤10	✓
Nickel (µg/L)	<1	24	2	4	≤70	✓
Residual Chlorine (mg/L)	0.1	1.4	0.6	1.0	≤5	✓
E. coli (cfu <sup>@</sup> /100 mL)	0	0	0	0	0	<b>√</b>

<sup>#</sup> RDT results for six metals are presented.

<sup>\*</sup> A "\sqrt{"}" indicates 100% compliance of drinking water quality with the HKDWS in all randomly selected premises based on the corresponding testing protocol. For the two-tier water sampling test results of the six metal parameters, the test result will be regarded as complying with the HKDWS if (i) there is no exceedance found in RDT sample or (ii) there is no exceedance found in the 30MS sample in case the RDT sample fails.

<sup>@</sup> cfu = colony forming unit

- 7. The analysis of the monitoring results in 2023 under the Enhanced Programme is given below: -
  - (a) For antimony, cadmium and chromium, all the results were below the reporting limit  $^1$  of  $<1~\mu g/L$ . It indicates that the contents of antimony, cadmium and chromium in the drinking water at consumers' taps in Hong Kong are very low.
  - (b) For copper, the maximum and the  $95^{th}$  percentile values were  $610 \,\mu g/L$  and  $60 \,\mu g/L$  respectively which were below the standard value of  $2 \, 000 \,\mu g/L$  in the HKDWS. It indicates that the risk of exceedance of copper content in the drinking water at consumers' taps in Hong Kong is low.
  - (c) For lead, four RDT samples exceeded the standard value of 10 μg/L with a maximum value of 23 μg/L but the corresponding 30MS samples were found complying with the HKDWS. This represents that the drinking water quality of these premises complied with the HKDWS. The exceedance of the RDT samples was likely due to unduly long stagnation time before sampling or sporadic presence of metal particles. The 95<sup>th</sup> percentile value of all RDT samples was 1 μg/L which was below the standard value of 10 μg/L. It indicates that the risk of exceedance of lead content in the drinking water at consumers' taps in Hong Kong is low.
  - (d) For nickel, the maximum and the 95<sup>th</sup> percentile values were 24  $\mu g/L$  and 4  $\mu g/L$  respectively, which were below the standard value of 70  $\mu g/L$  in the HKDWS. It indicates that the risk of exceedance of nickel content in the drinking water at consumers' taps in Hong Kong is low.
  - (e) For residual chlorine, the maximum and the 95<sup>th</sup> percentile values were 1.4 mg/L and 1.0 mg/L respectively, which were below the standard value of 5 mg/L in the HKDWS. It indicates that the risk of exceedance of residual chlorine content in the drinking water at consumers' taps in Hong Kong is low.
  - (f) All drinking water samples collected were found to be free of *E. coli* which fully complied with the HKDWS. It indicates that the risk of faecal contamination in the drinking water at consumers' taps in Hong Kong is very low.

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Reporting limit is the lowest level within an analytical method's operation range.

8. Overall, the drinking water quality of all premises randomly selected under the Enhanced Programme in 2023 complied with the HKDWS in respect of the six metals, residual chlorine and *E. coli*.

#### **OBSERVATIONS**

- 9. The level of antimony of all RDT samples collected from 2017 to 2023 under the Enhanced Programme were below the reporting limit of  $<1 \mu g/L$ . In other words, the risk of contamination of drinking water by antimony at consumers' taps in Hong Kong is very low. In light of this, we will review the need to continue the monitoring of antimony at consumers' taps under the Enhanced Programme<sup>2</sup>.
- 10. The maximum and 95<sup>th</sup> percentile values of chromium in the RDT samples collected from 2017 to 2023 under the Enhanced Programme were 4  $\mu$ g/L and <1  $\mu$ g/L respectively, both of which were below the standard value in the HKDWS. It indicates that the risk of exceedance of chromium content in the drinking water at consumers' taps in Hong Kong continues to be very low.
- 11. As for cadmium, copper, lead and nickel, the 95<sup>th</sup> percentile values of their RDT samples collected from 2017 to 2023 under the Enhanced Programme were <1  $\mu$ g/L, 80  $\mu$ g/L, 1  $\mu$ g/L and 4  $\mu$ g/L respectively which were below their corresponding standard values in the HKDWS. Taking account of the maximum values<sup>3</sup> in their RDT samples, it indicates that the risk of exceedance of these metals in the drinking water at consumers' taps in Hong Kong continues to be low.
- 12. The drinking water samples collected from 2021 to 2023 under the Enhanced Programme all complied with the HKDWS in respect of residual chlorine and *E. coli*. It indicates that the bacteriological quality of the drinking water at consumers' taps in Hong Kong is satisfactory.

A review of HKDWS is being conducted and the monitoring results collected under Enhanced Programme will be taken into consideration. Although antimony may be excluded from the Enhanced Programme for monitoring at consumers' taps, it will continue to be monitored in the water supply systems of the WSD.

The maximum values of cadmium, copper, lead and nickel in the RDT samples collected from 2017 to 2023 under the Enhanced Programme were 2 μg/L, 750 μg/L, 30 μg/L and 290 μg/L respectively. Details have been reported in the previous DWSAC Papers on Annual Water Quality Statistics of the Enhanced Programme.

#### PUBLICATION OF STATISTICS OF ANNUAL MONITORING RESULTS

- 13. The WSD will publish the statistics of the above annual monitoring results on its website<sup>4</sup> including: -
  - (i) the overall statistics for the whole territory in Hong Kong (Table 1 above); and
  - (ii) summary tables showing the minimum, maximum and average values of the contents of the six metals, residual chlorine and *E. coli* in the water samples taken in each DC district under the Enhanced Programme (Appendix I).
- 14. Apart from the above statistical data, the background of the Enhanced Programme as well as the analysis of the monitoring results as discussed in paragraphs 7 to 8 above will also be provided on the website.

Development Bureau Water Supplies Department February 2024

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<sup>4</sup> www.wsd.gov.hk/en/dwsewqmp

#### 水質監測優化計劃 - 全港 2023年1月1日至2023年12月31日

### Enhanced Water Quality Monitoring Programme - The Whole Territory for the Period from 1/1/2023 to 31/12/2023

#### 用戶水龍頭的水質監測數據

Monitoring Data of the samples taken at Consumers' Taps

参數 Parameter	抽取樣本處所 總數 Total No. of	單位 Unit	М	監測數據 onitoring Da	ıta	香港食水標準 的標準值 Standard Value	達標 Compliance <sup>(1)</sup>
r ar ameter	Sampling Premises	Omt	最低值 Minimum	最高值 Maximum	平均值 Average	in HKDWS	Compliance
銻 Antimony	661		<1	<1	<1	≤20	✓
鎘 Cadmium	661		<1	<1	<1	≤3	✓
鉻 Chromium	661	微克/公升	<1	<1	<1	≤50	✓
銅 Copper	661	μg/L	<3	610	20	≤2 000	✓
鉛 Lead	661		<1	23 <sup>(2)</sup>	<1	≤10	✓
鎳 Nickel	661		<1	24	2	≤70	✓
餘氯 Residual Chlorine	661	毫克/公升 mg/L	0.1	1.4	0.6	≤5	✓
埃希氏大腸桿菌 Escherichia coli	661	菌落數/100 毫升 cfu*/100mL	0	0	0	0	✓

<sup>\*</sup> cfu = Colony forming unit

#### <u>註釋:</u>

#### Note:

- (1) "✓"表示根據六種金屬(採用兩級取樣規程)、餘氯和埃希氏大腸桿菌的測試結果,所有被隨機抽選處所的食水水質均完全符合香港食水標準。
  - A "\sqrt{"}" indicates 100% compliance of drinking water quality with the HKDWS in all randomly selected premises based on the test results for 6 metals (using the two-tier water sampling protocol), residual chlorine and *E. coli*.
- (2) 其中四個處所的第一級水樣本(即「日間隨機取樣」)鉛含量超過標準值10微克/公升,當中最高值為23微克/公升。按 既定的兩級取樣規程,當第一級水樣本發現金屬含量超標時,隨即會測試第二級30分鐘靜水樣本以核實結果。水務署測 試了相關的30分鐘靜水樣本,結果符合香港食水標準鉛的標準值10微克/公升,表示相關處所的食水符合香港食水標準 ,第一級水樣本出現超標可能是因為收集水樣本之前水龍頭靜水時間太長或偶然出現的金屬微粒引致。

The lead content of Tier 1 Random Day Time ("RDT") samples from four of the premises exceeded the standard value of  $10~\mu g/L$  with a maximum of  $23~\mu g/L$ . According to the established two-tier sampling protocol, the Tier 2 30-minute stagnation ("30MS") sample would be tested when exceedance in metal content was found in the Tier 1 sample to verify the test result. The Water Supplies Department tested the relevant Tier 2 30MS samples and the test results complied with the HKDWS for lead of  $10~\mu g/L$ , representing compliance of the drinking water quality of the premises concerned with the HKDWS. The exceedance of the Tier 1 RDT samples are likely due to unduly long stagnation time before sampling or sporadic presence of metal particles.

#### 水質監測優化計劃 - 中西區 2023年1月1日至2023年12月31日

### Enhanced Water Quality Monitoring Programme - Central and Western District for the Period from 1/1/2023 to 31/12/2023

#### 用戶水龍頭的水質監測數據

Monitoring Data of the samples taken at Consumers' Taps

参數 Parameter	I Lotal No of		М	監測數據 onitoring Da	ta	香港食水標準 的標準值 Standard Value	<b>達標</b>
r ar ameter	Sampling Premises	Unit	最低值 Minimum	最高值 Maximum	平均值 Average	in HKDWS	Compliance <sup>(1)</sup>
銻 Antimony	24		<1	<1	<1	≤20	✓
鎘 Cadmium	24		<1	<1	<1	≤3	✓
鉻 Chromium	24	微克/公升	<1	<1	<1	≤50	✓
銅 Copper	24	μg/L	4	130	30	≤2 000	✓
鉛 Lead	24		<1	12 <sup>(2)</sup>	1	≤10	✓
鎳 Nickel	24		1	4	2	≤70	✓
餘氯 Residual Chlorine	24	毫克/公升 mg/L	0.1	1.0	0.6	≤5	✓
埃希氏大腸桿菌 Escherichia coli	24	菌落數/100 毫升 cfu*/100mL	0	0	0	0	✓

<sup>\*</sup> cfu = Colony forming unit

#### <u>註釋:</u>

#### Note:

- (1) "✓"表示根據六種金屬(採用兩級取樣規程)、餘氯和埃希氏大腸桿菌的測試結果,所有被隨機抽選處所的食水水質均完全符合香港食水標準。
  - A "\sqrt{"}" indicates 100% compliance of drinking water quality with the HKDWS in all randomly selected premises based on the test results for 6 metals (using the two-tier water sampling protocol), residual chlorine and *E. coli*.
- (2) 其中一個處所的第一級水樣本(即「日間隨機取樣」)鉛含量為12微克/公升。按既定的兩級取樣規程,當第一級水樣本 發現金屬含量超標時,隨即會測試第二級30分鐘靜水樣本以核實結果。水務署測試了相關的30分鐘靜水樣本,而結果為3 微克/公升,符合香港食水標準鉛的標準值10微克/公升,表示相關處所的食水符合香港食水標準。第一級水樣本出現 超標可能是因為收集水樣本之前水龍頭靜水時間太長或偶然出現的金屬微粒引致。
  - The lead content of a Tier 1 Random Day Time ("RDT") sample from one of the premises was 12  $\mu$ g/L. According to the established two-tier sampling protocol, the Tier 2 30-minute stagnation ("30MS") sample would be tested when exceedance in metal content was found in the Tier 1 sample to verify the test result. The Water Supplies Department tested the relevant Tier 2 30MS sample, the test result was 3  $\mu$ g/L and complied with the HKDWS for lead of 10  $\mu$ g/L, representing compliance of the drinking water quality of the premises concerned with the HKDWS. The exceedance of the Tier 1 RDT sample is likely due to unduly long stagnation time before sampling or sporadic presence of metal particles.

### 水質監測優化計劃 - 灣仔區

#### 2023年1月1日至2023年12月31日

## Enhanced Water Quality Monitoring Programme - Wan Chai District for the Period from 1/1/2023 to 31/12/2023

#### 用戶水龍頭的水質監測數據

Monitoring Data of the samples taken at Consumers' Taps

参數 Parameter	抽取樣本處所 總數 Total No. of Unit		М	監測數據 onitoring Da	ta	香港食水標準 的標準值 Standard Value	<b>達標</b>
r ar ameter	Sampling Premises	Omt	最低值 Minimum	最高值 Maximum	平均值 Average	in HKDWS	Compliance <sup>(1)</sup>
銻 Antimony	17		<1	<1	<1	≤20	✓
鎘 Cadmium	17		<1	<1	<1	≤3	✓
鉻 Chromium	17	微克/公升	<1	<1	<1	≤50	✓
銅 Copper	17	μg/L	<3	44	20	≤2 000	✓
鉛 Lead	17		<1	<1	<1	≤10	✓
鎳 Nickel	17		<1	3	1	≤70	✓
餘氯 Residual Chlorine	17	毫克/公升 mg/L	0.2	1.1	0.7	≤5	✓
埃希氏大腸桿菌 Escherichia coli	17	菌落數/100 毫升 cfu*/100mL	0	0	0	0	✓

<sup>\*</sup> cfu = Colony forming unit

#### <u>註釋:</u>

#### Note:

(1) "✓"表示根據六種金屬(採用兩級取樣規程)、餘氯和埃希氏大腸桿菌的測試結果,所有被隨機抽選處所的食水水質均完全符合香港食水標準。

#### 水質監測優化計劃 - 東區 2023年1月1日至2023年12月31日

## Enhanced Water Quality Monitoring Programme - Eastern District for the Period from 1/1/2023 to 31/12/2023

#### 用戶水龍頭的水質監測數據

Monitoring Data of the samples taken at Consumers' Taps

参數 Parameter	抽取樣本處所 總數 Total No. of	單位 Unit	М	監測數據 onitoring Da	ıta	香港食水標準 的標準值 Standard Value	<b>達標</b>
r ar ameter	Sampling Premises	Omt	最低值 Minimum	最高值 Maximum	平均值 Average	in HKDWS	Compliance <sup>(1)</sup>
銻 Antimony	47		<1	<1	<1	≤20	✓
鎘 Cadmium	47		<1	<1	<1	≤3	✓
鉻 Chromium	47	微克/公升	<1	<1	<1	≤50	✓
銅 Copper	47	μg/L	3	63	20	≤2 000	✓
鉛 Lead	47		<1	2	<1	≤10	✓
鎳 Nickel	47		<1	23	2	≤70	✓
餘氯 Residual Chlorine	47	毫克/公升 mg/L	0.1	1.1	0.5	≤5	✓
埃希氏大腸桿菌 Escherichia coli	47	菌落數/100 毫升 cfu*/100mL	0	0	0	0	✓

<sup>\*</sup> cfu = Colony forming unit

#### <u>註釋:</u>

#### Note:

(1) "✓"表示根據六種金屬(採用兩級取樣規程)、餘氯和埃希氏大腸桿菌的測試結果,所有被隨機抽選處所的食水水質均完全符合香港食水標準。

#### 水質監測優化計劃 - 南區 2023年1月1日至2023年12月31日

## Enhanced Water Quality Monitoring Programme - Southern District for the Period from 1/1/2023 to 31/12/2023

#### 用戶水龍頭的水質監測數據

Monitoring Data of the samples taken at Consumers' Taps

参數 Parameter	抽取樣本處所 總數 Total No. of	單位 Unit	М	監測數據 onitoring Da	ta	香港食水標準 的標準值 Standard Value in HKDWS	<b>達標</b>
r ar ameter	Sampling Premises	Omt	最低值 Minimum	最高值 Maximum	平均值 Average		Compliance <sup>(1)</sup>
銻 Antimony	24		<1	<1	<1	≤20	✓
鎘 Cadmium	24		<1	<1	<1	≤3	✓
鉻 Chromium	24	微克/公升	<1	<1	<1	≤50	✓
銅 Copper	24	μg/L	4	140	30	≤2 000	✓
鉛 Lead	24		<1	8	<1	≤10	✓
鎳 Nickel	24		<1	4	2	≤70	✓
餘氯 Residual Chlorine	24	毫克/公升 mg/L	0.1	0.9	0.4	≤5	✓
埃希氏大腸桿菌 Escherichia coli	24	菌落數/100 毫升 cfu*/100mL	0	0	0	0	✓

<sup>\*</sup> cfu = Colony forming unit

#### <u>註釋:</u>

#### Note:

(1) "✓"表示根據六種金屬(採用兩級取樣規程)、餘氯和埃希氏大腸桿菌的測試結果,所有被隨機抽選處所的食水水質均完全符合香港食水標準。

#### 水質監測優化計劃 - 油尖旺區 2023年1月1日至2023年12月31日

## Enhanced Water Quality Monitoring Programme - Yau Tsim Mong District for the Period from 1/1/2023 to 31/12/2023

#### 用戶水龍頭的水質監測數據

Monitoring Data of the samples taken at Consumers' Taps

参數 Parameter	抽取樣本處所 總數 Total No. of	總數 單位		監測數據 onitoring Da	ta	香港食水標準 的標準值 Standard Value	<b>達標</b>
r ar ameter	Sampling Premises	Omt	最低值 Minimum	最高值 Maximum	平均值 Average	in HKDWS	Compliance <sup>(1)</sup>
銻 Antimony	33		<1	<1	<1	≤20	✓
鎘 Cadmium	33		<1	<1	<1	≤3	✓
鉻 Chromium	33	微克/公升	<1	<1	<1	≤50	✓
銅 Copper	33	μg/L	<3	98	20	≤2 000	✓
鉛 Lead	33		<1	2	<1	≤10	✓
鎳 Nickel	33		<1	12	2	≤70	✓
餘氯 Residual Chlorine	33	毫克/公升 mg/L	0.2	1.0	0.6	≤5	✓
埃希氏大腸桿菌 Escherichia coli	33	菌落數/100 毫升 cfu*/100mL	0	0	0	0	✓

<sup>\*</sup> cfu = Colony forming unit

#### <u>註釋:</u>

#### Note:

(1) "✓"表示根據六種金屬(採用兩級取樣規程)、餘氯和埃希氏大腸桿菌的測試結果,所有被隨機抽選處所的食水水質均完全符合香港食水標準。

#### 水質監測優化計劃 - 深水埗區 2023年1月1日至2023年12月31日

## Enhanced Water Quality Monitoring Programme - Sham Shui Po District for the Period from 1/1/2023 to 31/12/2023

#### 用戶水龍頭的水質監測數據

Monitoring Data of the samples taken at Consumers' Taps

参數 Parameter	抽取樣本處所 總數 Total No. of	單位 Unit	М	監測數據 onitoring Da	ta	香港食水標準 的標準值 Standard Value in HKDWS	達標 Compliance <sup>(1)</sup>
1 at affecter	Sampling Premises	Omt	最低值 Minimum	最高值 Maximum	平均值 Average		Compliance
銻 Antimony	40		<1	<1	<1	≤20	✓
鎘 Cadmium	40		<1	<1	<1	≤3	✓
鉻 Chromium	40	微克/公升	<1	<1	<1	≤50	✓
銅 Copper	40	μg/L	<3	62	20	≤2 000	✓
鉛 Lead	40		<1	8	<1	≤10	✓
鎳 Nickel	40		<1	4	2	≤70	✓
餘氯 Residual Chlorine	40	毫克/公升 mg/L	0.1	1.0	0.6	≤5	✓
埃希氏大腸桿菌 Escherichia coli	40	菌落數/100 毫升 cfu*/100mL	0	0	0	0	✓

<sup>\*</sup> cfu = Colony forming unit

#### <u>註釋:</u>

#### Note:

(1) "✓"表示根據六種金屬(採用兩級取樣規程)、餘氯和埃希氏大腸桿菌的測試結果,所有被隨機抽選處所的食水水質均完全符合香港食水標準。

#### 水質監測優化計劃 - 九龍城區 2023年1月1日至2023年12月31日

## Enhanced Water Quality Monitoring Programme - Kowloon City District for the Period from 1/1/2023 to 31/12/2023

#### 用戶水龍頭的水質監測數據

Monitoring Data of the samples taken at Consumers' Taps

参數 Parameter	抽取樣本處所 總數 Total No. of	單位 Unit	М	監測數據 onitoring Da	ıta	香港食水標準 的標準值 Standard Value in HKDWS	<b>達標</b>
r ar ameter	Sampling Premises	Omt	最低值 Minimum	最高值 Maximum	平均值 Average		Compliance <sup>(1)</sup>
銻 Antimony	39		<1	<1	<1	≤20	✓
鎘 Cadmium	39		<1	<1	<1	≤3	✓
鉻 Chromium	39	微克/公升	<1	<1	<1	≤50	✓
銅 Copper	39	μg/L	<3	88	20	≤2 000	✓
鉛 Lead	39		<1	8	<1	≤10	✓
鎳 Nickel	39		<1	5	2	≤70	✓
餘氯 Residual Chlorine	39	毫克/公升 mg/L	0.2	1.2	0.6	≤5	✓
埃希氏大腸桿菌 Escherichia coli	39	菌落數/100 毫升 cfu*/100mL	0	0	0	0	✓

<sup>\*</sup> cfu = Colony forming unit

#### <u>註釋:</u>

#### Note:

(1) "✓"表示根據六種金屬(採用兩級取樣規程)、餘氯和埃希氏大腸桿菌的測試結果,所有被隨機抽選處所的食水水質均完全符合香港食水標準。

#### 水質監測優化計劃-黃大仙區 2023年1月1日至2023年12月31日

### Enhanced Water Quality Monitoring Programme - Wong Tai Sin District for the Period from 1/1/2023 to 31/12/2023

#### 用戶水龍頭的水質監測數據

Monitoring Data of the samples taken at Consumers' Taps

参數 Parameter	抽取樣本處所 總數 Total No. of	單位 Unit	М	監測數據 onitoring Da	ta	香港食水標準 的標準值 Standard Value	<b>達標</b>
r ar ameter	Sampling Premises	Omt	最低值 Minimum	最高值 Maximum	平均值 Average	in HKDWS	Compliance <sup>(1)</sup>
銻 Antimony	40		<1	<1	<1	≤20	✓
鎘 Cadmium	40		<1	<1	<1	≤3	✓
鉻 Chromium	40	微克/公升	<1	<1	<1	≤50	✓
銅 Copper	40	μg/L	<3	610	30	≤2 000	✓
鉛 Lead	40		<1	23 <sup>(2)</sup>	1	≤10	✓
鎳 Nickel	40		<1	19	2	≤70	✓
餘氯 Residual Chlorine	40	毫克/公升 mg/L	0.1	1.2	0.6	≤5	✓
埃希氏大腸桿菌 Escherichia coli	40	菌落數/100 毫升 cfu*/100mL	0	0	0	0	✓

<sup>\*</sup> cfu = Colony forming unit

#### <u>註釋:</u>

#### Note:

- (1) "✓"表示根據六種金屬(採用兩級取樣規程)、餘氯和埃希氏大腸桿菌的測試結果,所有被隨機抽選處所的食水水質均完全符合香港食水標準。
  - A "\sqrt{"}" indicates 100% compliance of drinking water quality with the HKDWS in all randomly selected premises based on the test results for 6 metals (using the two-tier water sampling protocol), residual chlorine and *E. coli*.
- (2) 其中一個處所的第一級水樣本(即「日間隨機取樣」)鉛含量為23微克/公升。按既定的兩級取樣規程,當第一級水樣本 發現金屬含量超標時,隨即會測試第二級30分鐘靜水樣本以核實結果。水務署測試了相關的30分鐘靜水樣本,而結果為9 微克/公升,符合香港食水標準鉛的標準值10微克/公升,表示相關處所的食水符合香港食水標準。第一級水樣本出現 超標可能是因為收集水樣本之前水龍頭靜水時間太長或偶然出現的金屬微粒引致。
  - The lead content of a Tier 1 Random Day Time ("RDT") sample from one of the premises was 23  $\mu$ g/L. According to the established two-tier sampling protocol, the Tier 2 30-minute stagnation ("30MS") sample would be tested when exceedance in metal content was found in the Tier 1 sample to verify the test result. The Water Supplies Department tested the relevant Tier 2 30MS sample, the test result was 9  $\mu$ g/L and complied with the HKDWS for lead of 10  $\mu$ g/L, representing compliance of the drinking water quality of the premises concerned with the HKDWS. The exceedance of the Tier 1 RDT sample is likely due to unduly long stagnation time before sampling or sporadic presence of metal particles.

### 水質監測優化計劃 - 觀塘區

#### 2023年1月1日至2023年12月31日

## Enhanced Water Quality Monitoring Programme - Kwun Tong District for the Period from 1/1/2023 to 31/12/2023

#### 用戶水龍頭的水質監測數據

Monitoring Data of the samples taken at Consumers' Taps

参數 Parameter	抽取樣本處所 總數 Total No. of	單位 Unit	М	監測數據 onitoring Da	ıta	香港食水標準 的標準值 Standard Value	<b>達標</b>
r ar ameter	Sampling Premises	Omt	最低值 Minimum	最高值 Maximum	平均值 Average	in HKDWS	Compliance <sup>(1)</sup>
銻 Antimony	55		<1	<1	<1	≤20	✓
鎘 Cadmium	55		<1	<1	<1	≤3	✓
鉻 Chromium	55	微克/公升	<1	<1	<1	≤50	✓
銅 Copper	55	μg/L	<3	160	20	≤2 000	✓
鉛 Lead	55		<1	4	<1	≤10	✓
鎳 Nickel	55		<1	10	2	≤70	✓
餘氯 Residual Chlorine	55	毫克/公升 mg/L	0.1	0.8	0.5	≤5	✓
埃希氏大腸桿菌 Escherichia coli	55	菌落數/100 毫升 cfu*/100mL	0	0	0	0	✓

<sup>\*</sup> cfu = Colony forming unit

#### <u>註釋:</u>

#### Note:

(1) "✓"表示根據六種金屬(採用兩級取樣規程)、餘氯和埃希氏大腸桿菌的測試結果,所有被隨機抽選處所的食水水質均完全符合香港食水標準。

### 水質監測優化計劃 - 葵青區

#### 2023年1月1日至2023年12月31日

Enhanced Water Quality Monitoring Programme - Kwai Tsing District for the Period from 1/1/2023 to 31/12/2023

#### 用戶水龍頭的水質監測數據

Monitoring Data of the samples taken at Consumers' Taps

参數 Parameter	抽取樣本處所 總數 Total No. of Unit		M	監測數據 onitoring Da	ıta	香港食水標準 的標準值 Standard Value	達標 Compliance <sup>(1)</sup>
1 at ameter	Sampling Premises	Omt	最低值 Minimum	最高值 Maximum	平均值 Average	in HKDWS	Compliance
銻 Antimony	40		<1	<1	<1	≤20	✓
鎘 Cadmium	40		<1	<1	<1	≤3	✓
鉻 Chromium	40	微克/公升	<1	<1	<1	≤50	✓
銅 Copper	40	μg/L	<3	260	20	≤2 000	✓
鉛 Lead	40		<1	17 <sup>(2)</sup>	<1	≤10	✓
鎳 Nickel	40		<1	4	1	≤70	✓
餘氯 Residual Chlorine	40	毫克/公升 mg/L	0.1	1.1	0.6	≤5	✓
埃希氏大腸桿菌 Escherichia coli	40	菌落數/100 毫升 cfu*/100mL	0	0	0	0	✓

<sup>\*</sup> cfu = Colony forming unit

#### <u>註釋:</u>

#### Note:

- (1) "✓"表示根據六種金屬(採用兩級取樣規程)、餘氯和埃希氏大腸桿菌的測試結果,所有被隨機抽選處所的食水水質均完全符合香港食水標準。
  - A "\sqrt{"}" indicates 100% compliance of drinking water quality with the HKDWS in all randomly selected premises based on the test results for 6 metals (using the two-tier water sampling protocol), residual chlorine and *E. coli*.
- (2) 其中一個處所的第一級水樣本(即「日間隨機取樣」)鉛含量為17微克/公升。按既定的兩級取樣規程,當第一級水樣本 發現金屬含量超標時,隨即會測試第二級30分鐘靜水樣本以核實結果。水務署測試了相關的30分鐘靜水樣本,而結果為 <1微克/公升,符合香港食水標準鉛的標準值10微克/公升,表示相關處所的食水符合香港食水標準。第一級水樣本出 現超標可能是因為收集水樣本之前水龍頭靜水時間太長或偶然出現的金屬微粒引致。
  - The lead content of a Tier 1 Random Day Time ("RDT") sample from one of the premises was 17  $\mu$ g/L. According to the established two-tier sampling protocol, the Tier 2 30-minute stagnation ("30MS") sample would be tested when exceedance in metal content was found in the Tier 1 sample to verify the test result. The Water Supplies Department tested the relevant Tier 2 30MS sample, the test result was <1  $\mu$ g/L and complied with the HKDWS for lead of 10  $\mu$ g/L, representing compliance of the drinking water quality of the premises concerned with the HKDWS. The exceedance of the Tier 1 RDT sample is likely due to unduly long stagnation time before sampling or sporadic presence of metal particles.

#### 水質監測優化計劃 - 荃灣區 2023年1月1日至2023年12月31日

## Enhanced Water Quality Monitoring Programme - Tsuen Wan District for the Period from 1/1/2023 to 31/12/2023

#### 用戶水龍頭的水質監測數據

Monitoring Data of the samples taken at Consumers' Taps

参數 Parameter	抽取樣本處所 總數 Total No. of	單位 Unit	М	監測數據 onitoring Da	ta	香港食水標準 的標準值 Standard Value	<b>達標</b>
r ar ameter	Sampling Premises	Unit	最低值 Minimum	最高值 Maximum	平均值 Average	in HKDWS	Compliance <sup>(1)</sup>
銻 Antimony	32		<1	<1	<1	≤20	✓
鎘 Cadmium	32		<1	<1	<1	≤3	✓
鉻 Chromium	32	微克/公升	<1	<1	<1	≤50	✓
銅 Copper	32	μg/L	<3	76	20	≤2 000	✓
鉛 Lead	32		<1	2	<1	≤10	✓
鎳 Nickel	32		<1	6	2	≤70	✓
餘氯 Residual Chlorine	32	毫克/公升 mg/L	0.1	1.0	0.6	≤5	✓
埃希氏大腸桿菌 Escherichia coli	32	菌落數/100 毫升 cfu*/100mL	0	0	0	0	✓

<sup>\*</sup> cfu = Colony forming unit

#### <u>註釋:</u>

#### Note:

(1) "✓"表示根據六種金屬(採用兩級取樣規程)、餘氯和埃希氏大腸桿菌的測試結果,所有被隨機抽選處所的食水水質均完全符合香港食水標準。

### 水質監測優化計劃 - 屯門區

#### 2023年1月1日至2023年12月31日 Enhanced Water Quality Monitoring Programme - Tuen Mun District

for the Period from 1/1/2023 to 31/12/2023

#### 用戶水龍頭的水質監測數據

Monitoring Data of the samples taken at Consumers' Taps

参 <b>數</b> Parameter	抽取樣本處所 總數 Total No. of	單位 Unit	М	監測數據 onitoring Da	ta	香港食水標準 的標準值 Standard Value	<b>達標</b>
r ar ameter	Sampling Premises	Unit	最低值 Minimum	最高值 Maximum	平均值 Average	in HKDWS	Compliance <sup>(1)</sup>
銻 Antimony	39		<1	<1	<1	≤20	✓
鎘 Cadmium	39		<1	<1	<1	≤3	✓
鉻 Chromium	39	微克/公升	<1	<1	<1	≤50	✓
銅 Copper	39	μg/L	<3	63	10	≤2 000	✓
鉛 Lead	39		<1	2	<1	≤10	✓
鎳 Nickel	39		<1	5	1	≤70	✓
餘氯 Residual Chlorine <sup>(2)</sup>	39	毫克/公升 mg/L	0.1	1.0	0.6	≤5	✓
埃希氏大腸桿菌 Escherichia coli <sup>(2)</sup>	39	菌落數/100 毫升 cfu*/100mL	0	0	0	0	✓

<sup>\*</sup> cfu = Colony forming unit

#### <u>註釋:</u>

#### Note:

(1) "✓"表示根據六種金屬(採用兩級取樣規程)、餘氯和埃希氏大腸桿菌的測試結果,所有被隨機抽選處所的食水水質均完全符合香港食水標準。

#### 水質監測優化計劃 - 元朗區 2023年1月1日至2023年12月31日

## Enhanced Water Quality Monitoring Programme - Yuen Long District for the Period from 1/1/2023 to 31/12/2023

#### 用戶水龍頭的水質監測數據

Monitoring Data of the samples taken at Consumers' Taps

参數 Parameter	抽取樣本處所 總數 Total No. of	單位 Unit	М	監測數據 onitoring Da	ıta	香港食水標準 的標準值 Standard Value	<b>達標</b>
r ar ameter	Sampling Premises	Unit	最低值 Minimum	最高值 Maximum	平均值 Average	in HKDWS	Compliance <sup>(1)</sup>
銻 Antimony	56		<1	<1	<1	≤20	✓
鎘 Cadmium	56		<1	<1	<1	≤3	✓
鉻 Chromium	56	微克/公升	<1	<1	<1	≤50	✓
銅 Copper	56	μg/L	<3	60	20	≤2 000	✓
鉛 Lead	56		<1	<1	<1	≤10	✓
鎳 Nickel	56		<1	6	2	≤70	✓
餘氯 Residual Chlorine	56	毫克/公升 mg/L	0.2	1.4	0.6	≤5	✓
埃希氏大腸桿菌 Escherichia coli	56	菌落數/100 毫升 cfu*/100mL	0	0	0	0	✓

<sup>\*</sup> cfu = Colony forming unit

#### <u>註釋:</u>

#### Note:

(1) "✓"表示根據六種金屬(採用兩級取樣規程)、餘氯和埃希氏大腸桿菌的測試結果,所有被隨機抽選處所的食水水質均完全符合香港食水標準。

#### 水質監測優化計劃 - 北區 2023年1月1日至2023年12月31日

## Enhanced Water Quality Monitoring Programme - North District for the Period from 1/1/2023 to 31/12/2023

#### 用戶水龍頭的水質監測數據

Monitoring Data of the samples taken at Consumers' Taps

参數 Parameter	抽取樣本處所 總數 Total No. of	單位 Unit	М	監測數據 onitoring Da	ta	香港食水標準 的標準值 Standard Value	<b>達標</b>
r ar ameter	Sampling Premises	Unit	最低值 Minimum	最高值 Maximum	平均值 Average	in HKDWS	Compliance <sup>(1)</sup>
銻 Antimony	32		<1	<1	<1	≤20	✓
鎘 Cadmium	32		<1	<1	<1	≤3	✓
鉻 Chromium	32	微克/公升	<1	<1	<1	≤50	✓
銅 Copper	32	μg/L	<3	280	20	≤2 000	✓
鉛 Lead	32		<1	4	<1	≤10	✓
鎳 Nickel	32		1	11	2	≤70	✓
餘氯 Residual Chlorine	32	毫克/公升 mg/L	0.2	1.0	0.6	≤5	✓
埃希氏大腸桿菌 Escherichia coli	32	菌落數/100 毫升 cfu*/100mL	0	0	0	0	✓

<sup>\*</sup> cfu = Colony forming unit

#### <u>註釋:</u>

#### Note:

(1) "✓"表示根據六種金屬(採用兩級取樣規程)、餘氯和埃希氏大腸桿菌的測試結果,所有被隨機抽選處所的食水水質均完全符合香港食水標準。

#### 水質監測優化計劃 - 大埔區 2023年1月1日至2023年12月31日

## Enhanced Water Quality Monitoring Programme - Tai Po District for the Period from 1/1/2023 to 31/12/2023

#### 用戶水龍頭的水質監測數據

Monitoring Data of the samples taken at Consumers' Taps

参數 Parameter	抽取樣本處所 總數 Total No. of	單位 Unit	М	監測數據 onitoring Da	ta	香港食水標準 的標準值 Standard Value	達標 Compliance <sup>(1)</sup>
r ar ameter	Sampling Premises	Unit	最低值 Minimum	最高值 Maximum	平均值 Average	in HKDWS	Compliance
銻 Antimony	32		<1	<1	<1	≤20	✓
鎘 Cadmium	32		<1	<1	<1	≤3	✓
鉻 Chromium	32	微克/公升	<1	<1	<1	≤50	✓
銅 Copper	32	μg/L	<3	170	30	≤2 000	✓
鉛 Lead	32		<1	5	<1	≤10	✓
鎳 Nickel	32		1	5	2	≤70	✓
餘氯 Residual Chlorine	32	毫克/公升 mg/L	0.3	1.0	0.7	≤5	✓
埃希氏大腸桿菌 Escherichia coli	32	菌落數/100 毫升 cfu*/100mL	0	0	0	0	✓

<sup>\*</sup> cfu = Colony forming unit

#### <u>註釋:</u>

#### Note:

(1) "✓"表示根據六種金屬(採用兩級取樣規程)、餘氯和埃希氏大腸桿菌的測試結果,所有被隨機抽選處所的食水水質均完全符合香港食水標準。

#### 水質監測優化計劃 - 沙田區 2023年1月1日至2023年12月31日

### Enhanced Water Quality Monitoring Programme - Sha Tin District for the Period from 1/1/2023 to 31/12/2023

#### 用戶水龍頭的水質監測數據

Monitoring Data of the samples taken at Consumers' Taps

参數 Parameter	抽取樣本處所 總數 Total No. of	單位 Unit	M	監測數據 onitoring Da	ta	香港食水標準的標準值 Standard Value	達標 Compliance <sup>(1)</sup>
r ar ameter	Sampling Premises	Unit	最低值 Minimum	最高值 Maximum	平均值 Average	in HKDWS	Compliance\
銻 Antimony	55		<1	<1	<1	≤20	✓
鎘 Cadmium	55		<1	<1	<1	≤3	✓
鉻 Chromium	55	微克/公升	<1	<1	<1	≤50	✓
銅 Copper	55	μg/L	<3	220	30	≤2 000	✓
鉛 Lead	55		<1	17 <sup>(2)</sup>	<1	≤10	✓
鎳 Nickel	55		<1	24	2	≤70	✓
餘氯 Residual Chlorine	55	毫克/公升 mg/L	0.2	1.3	0.6	≤5	✓
埃希氏大腸桿菌 Escherichia coli	55	菌落數/100 毫升 cfu*/100mL	0	0	0	0	✓

<sup>\*</sup> cfu = Colony forming unit

#### <u>註釋:</u>

#### Note:

- (1) "✓"表示根據六種金屬(採用兩級取樣規程)、餘氯和埃希氏大腸桿菌的測試結果,所有被隨機抽選處所的食水水質均完全符合香港食水標準。
  - A "\sqrt{"}" indicates 100% compliance of drinking water quality with the HKDWS in all randomly selected premises based on the test results for 6 metals (using the two-tier water sampling protocol), residual chlorine and *E. coli*.
- (2) 其中一個處所的第一級水樣本(即「日間隨機取樣」)鉛含量為17微克/公升。按既定的兩級取樣規程,當第一級水樣本發現金屬含量超標時,隨即會測試第二級30分鐘靜水樣本以核實結果。水務署測試了相關的30分鐘靜水樣本,而結果為1 微克/公升,符合香港食水標準鉛的標準值10微克/公升,表示相關處所的食水符合香港食水標準。第一級水樣本出現超標可能是因為收集水樣本之前水龍頭靜水時間太長或偶然出現的金屬微粒引致。
  - The lead content of a Tier 1 Random Day Time ("RDT") sample from one of the premises was 17  $\mu$ g/L. According to the established two-tier sampling protocol, the Tier 2 30-minute stagnation ("30MS") sample would be tested when exceedance in metal content was found in the Tier 1 sample to verify the test result. The Water Supplies Department tested the relevant Tier 2 30MS sample, the test result was 1  $\mu$ g/L and complied with the HKDWS for lead of 10  $\mu$ g/L, representing compliance of the drinking water quality of the premises concerned with the HKDWS. The exceedance of the Tier 1 RDT sample is likely due to unduly long stagnation time before sampling or sporadic presence of metal particles.

### 水質監測優化計劃 - 西貢區

#### 2023年1月1日至2023年12月31日

## Enhanced Water Quality Monitoring Programme - Sai Kung District for the Period from 1/1/2023 to 31/12/2023

#### 用戶水龍頭的水質監測數據

Monitoring Data of the samples taken at Consumers' Taps

参數 Parameter	抽取樣本處所 總數 Total No. of	單位 Unit	M	監測數據 onitoring Da	ıta	香港食水標準 的標準值 Standard Value	達標 Compliance <sup>(1)</sup>
1 at affect	Sampling Premises	Oint	最低值 Minimum	最高值 Maximum	平均值 Average	in HKDWS	Comphance
銻 Antimony	40		<1	<1	<1	≤20	✓
鎘 Cadmium	40		<1	<1	<1	≤3	✓
鉻 Chromium	40	微克/公升 μg/L	<1	<1	<1	≤50	✓
銅 Copper	40		<3	150	20	≤2 000	✓
鉛 Lead	40		<1	<1	<1	≤10	✓
鎳 Nickel	40		<1	9	2	≤70	✓
餘氯 Residual Chlorine	40	毫克/公升 mg/L	0.1	0.9	0.5	≤5	✓
埃希氏大腸桿菌 Escherichia coli	40	菌落數/100 毫升 cfu*/100mL	0	0	0	0	✓

<sup>\*</sup> cfu = Colony forming unit

#### 註釋:

#### Note:

(1) "✓"表示根據六種金屬(採用兩級取樣規程)、餘氯和埃希氏大腸桿菌的測試結果,所有被隨機抽選處所的食水水質均完全符合香港食水標準。

#### 水質監測優化計劃 - 離島區 2023年1月1日至2023年12月31日

### **Enhanced Water Quality Monitoring Programme - Islands District**

### for the Period from 1/1/2023 to 31/12/2023

#### 用戶水龍頭的水質監測數據

Monitoring Data of the samples taken at Consumers' Taps

参數 Parameter	抽取樣本處所 總數 Total No. of	單位 Unit	М	監測數據 onitoring Da	ıta	香港食水標準 的標準值 Standard Value	達標 Compliance <sup>(1)</sup>
1 at affecter	Sampling Premises	Unit	最低值 Minimum	最高值 Maximum	平均值 Average	in HKDWS	Compliance
銻 Antimony	16		<1	<1	<1	≤20	✓
鎘 Cadmium	16		<1	<1	<1	≤3	✓
鉻 Chromium	16	微克/公升 µg/L	<1	<1	<1	≤50	✓
銅 Copper	16		<3	51	10	≤2 000	✓
鉛 Lead	16		<1	<1	<1	≤10	✓
鎳 Nickel	16		<1	4	1	≤70	✓
餘氯 Residual Chlorine	16	毫克/公升 mg/L	0.3	1.1	0.8	≤5	✓
埃希氏大腸桿菌 Escherichia coli	16	菌落數/100 毫升 cfu*/100mL	0	0	0	0	✓

<sup>\*</sup> cfu = Colony forming unit

#### 註釋:

#### Note:

(1) "✓"表示根據六種金屬(採用兩級取樣規程)、餘氯和埃希氏大腸桿菌的測試結果,所有被隨機抽選處所的食水水質均完全 符合香港食水標準。