### 2024年10月至2025年9月之沖廁水水質

### Flushing Water Quality during the Period of October 2024 – September 2025

◆ 為善用海水這種可持續的水源,香港自 1950 年代後期起廣泛抽取海水,在隔除海水中較大的雜質及加入次氯酸鈉消毒後,供應給用戶沖廁。此外,為控制食水需求增長,自 2024 年 3 月起,水務署開始供應循環再用水作沖廁用途。為確保經處理後的海水(「沖廁用鹹水」)及沖廁用循環再用水水質在感官及衛生方面達可接受水平,水務署分別制定了沖廁用鹹水水質指標及循環再用水水質標準。市民可參閱水務署網頁(https://www.wsd.gov.hk/tc/core-businesses/water-resources/seawater-for-flushing/index.html)了解沖廁水的資訊。

Leveraging seawater as a sustainable water source, since the late 1950s, Hong Kong has extensively abstracted seawater, which is treated to remove larger impurities and disinfected with sodium hypochlorite before being supplied to users for toilet flushing. In addition, starting from March 2024, the Water Supplies Department ("WSD") is supplying recycled water for toilet flushing with a view to containing the fresh water demand. To ensure satisfactory quality of treated seawater ("salt water for flushing") and recycled water for flushing on grounds of aesthetic acceptance and hygiene, the WSD has established the Water Quality Objectives ("WQO") of Salt Water for Flushing Supply and Water Quality Standards for Recycled Water respectively. The public may visit the WSD website (https://www.wsd.gov.hk/en/core-businesses/water-resources/seawater-for-flushing/index.html) for information on flushing water.

• 沖廁用鹹水及循環再用水樣本是從客戶處所抽取。本報告期內,整體沖廁水(包括沖廁用鹹水及循環再用水)水質達標率為99.4%<sup>(註釋1)</sup>,完全符合沖廁水水質的服務指標,即沖廁水水質達標率在97%或以上。

Salt water and recycled water samples for flushing supply were collected at customer ends. During this reporting period, the compliance rate for the overall quality of salt water and recycled water supplied for flushing purposes is  $99.4\%^{(Note\ 1)}$ , which fully meets the performance target of achieving a  $\geq 97\%$  compliance rate.

# 表一、沖廁用鹹水的水質監測結果

**Table 1. Monitoring Data of Salt Water Quality for Flushing Supply** 

参數 Parameter	單位 Unit	監測結果 Monitoring Data (10/2024 - 09/2025)			沖廁用鹹水水質指標值 WQO Values of Salt
		最低值	最高值	平均值	Water for Flushing Supply
色度 Colour	Hazen Unit	Minimum < 5	Maximum 7	Average < 5	< 40
混濁度 Turbidity	NTU	0.1	24 (註釋 2) (Note 2)	2.7	< 20
氣味閾值 Threshold Odour Number		1	1	1	< 100
氨氮 Ammoniacal Nitrogen	毫克/公升 mg/L	< 0.02	0.19	0.03	< 1
總懸浮固體 Total Suspended Solids	毫克/公升 mg/L	< 5	27 (註釋 2) (Note 2)	< 5	< 20
溶解氧 Dissolved Oxygen	毫克/公升 mg/L	4.4	10	7.7	> 2
五日生化需氧量 5-day Biochemical Oxygen Demand	毫克/公升 mg/L	< 2	4.0	< 2	< 10
合成清潔劑 Synthetic Detergents	毫克/公升 mg/L	< 0.1	< 0.1	< 0.1	< 5
埃希氏大腸桿菌 Escherichia coli	菌落數/100 毫升 cfu*/100 mL	0	58	1	< 5 000

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

## 表二、沖廁用循環再用水的水質監測結果

**Table 2. Monitoring Data of Recycled Water Quality for Flushing Supply** 

参數	單位 Unit	監測結果 Monitoring Data (10/2024 - 09/2025)			循環再用水水質標準值 Water Quality
Parameter		最低值 Minimum	最高值 Maximum	平均值 Average	Standard Values for Recycled Water
色度 Colour	Hazen Unit	< 5	< 5	< 5	≤ 20
混濁度 Turbidity	NTU	0.3	1.1	0.6	≤ 5
氣味閾值 Threshold Odour Number		1	1	1	≤ 100
氨氮 Ammoniacal Nitrogen	毫克/公升 mg/L	0.03	0.05	0.04	≤1
總懸浮固體 Total Suspended Solids	毫克/公升 mg/L	< 5	< 5	< 5	≤ 5
溶解氧 Dissolved Oxygen	毫克/公升 mg/L	5.5	9.5	7.4	≥ 2
五日生化需氧量 5-day Biochemical Oxygen Demand	毫克/公升 mg/L	< 2	6.0	2.9	≤ 10
合成清潔劑 Synthetic Detergents	毫克/公升 mg/L	< 0.1	< 0.1	< 0.1	≤ 5
埃希氏大腸桿菌 Escherichia coli	菌落數/100 毫升 cfu*/100 mL	0	0	0	0
總餘氯 Total Residual Chlorine	毫克/公升 mg/L	0.2	1.4	0.5	≥ 0.2
酸鹼值(水溫 25℃時) pH at 25 ℃		7.4	7.6	7.5	6 – 9

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

## 註釋:

#### **Notes:**

(1) 沖廁水水質達標率的計算方法如下:-

<u>合格沖廁用鹹水樣本數目 + 合格沖廁用循環再用水樣本數目</u> 沖廁用鹹水樣本總數 + 沖廁用循環再用水樣本總數

The compliance rate of flushing water quality is calculated as follow:

 $\frac{\textit{Number of compliance flushing salt water samples} + \textit{Number of compliance flushing recycled water samples}}{\textit{Total number of flushing salt water samples}} \times 100\%$ 

(2) 在 2025 年 8 月抽取的兩個鹹水樣本錄得混濁度為 23 NTU 和 24 NTU 及總懸浮固體為 25 毫克/公 升和 27 毫克/公升。水務署已適時採取了跟進行動,於相關的供水系統再抽取樣本以確認沖廁用 鹹水水質。化驗結果顯示該樣本水質符合沖廁用鹹水水質指標,適合作沖廁用途,這顯示以上不 達標的情況只屬個別事件。

Turbidity of 23 NTU and 24 NTU and total suspended solids of 25 mg/L and 27 mg/L were found in two salt water samples collected in August 2025. Appropriate follow-up actions were timely taken and sampling visits to the relevant distribution system were repeated by WSD to verify the situation. Test results of the water samples were in compliance with the WQO of Salt Water for Flushing Supply and were suitable for flushing purpose. This indicated that they are isolated cases.