

Drinking Water Quality for the Period of April 2020 - March 2021

Points to Note:

- The Government of the Hong Kong Special Administrative Region promulgated on 22 April 2021 the latest Hong Kong Drinking Water Standards (HKDWS). As the monitoring data covered in this report was collected before the above date, compliance check in this report was made against the previous HKDWS (i.e. the corresponding guideline values (GVs)/provisional guideline values (PGVs) in the fourth edition of the World Health Organization's *Guidelines for Drinking-water Quality* published in 2011).
- Drinking water samples were taken at water treatment works, service reservoirs, connection points and publicly accessible consumer taps.
- The testing results of the drinking water samples taken during this period fully complied with the HKDWS.

Part A. Microbiological parameters

Parameter	Unit	Monitoring Data (04/2020 - 03/2021)			HKDWS	Compliance
		Minimum	Maximum	Average		
<i>E. coli</i>	cfu* per 100 mL	0	0	0	0	✓
Total Coliforms (Note 1)	cfu* per 100 mL	0	0	0	-	-
Cryptosporidium (Note 2)	no. of oocyst per 1,000 L	0	0	0	-	-
Giardia (Note 2)	no. of cyst per 1,000 L	0	0	0	-	-

* Colony forming unit (cfu)

Notes:

- (1) Although the HKDWS does not have a standard value for Total Coliforms, the WSD also monitors Total Coliforms in drinking water.
- (2) Although the HKDWS does not have a standard value for Cryptosporidium or Giardia, WSD also monitors Cryptosporidium and Giardia in drinking water.

Part B. Chemical parameters

Parameter	Unit	Monitoring Data (04/2020 - 03/2021)			HKDWS	Compliance
		Minimum	Maximum	Average		
Acrylamide	µg/L	< 0.4	< 0.4	< 0.4	≤ 0.5	✓
Alachlor	µg/L	< 5.0	< 5.0	< 5.0	≤ 20	✓
Aldicarb	µg/L	< 2.5	< 2.5	< 2.5	≤ 10	✓
Aldrin and Dieldrin	µg/L	< 0.008	< 0.008	< 0.008	≤ 0.03	✓
Antimony	mg/L	< 0.001	< 0.001	< 0.001	≤ 0.02	✓
Arsenic	mg/L	< 0.001	< 0.001	< 0.001	≤ 0.01	✓
Atrazine and its chloro-s-triazine metabolites	µg/L	< 25	< 25	< 25	≤ 100	✓
Barium	mg/L	0.002	0.024	0.014	≤ 0.7	✓
Benzene	µg/L	< 2.5	< 2.5	< 2.5	≤ 10	✓
Benzo[a]pyrene	µg/L	< 0.0020	< 0.0020	< 0.0020	≤ 0.7	✓
Boron	mg/L	< 0.02	0.07	0.03	≤ 2.4	✓
Bromate	µg/L	< 1.0	1.3	< 1.0	≤ 10	✓
Bromodichloromethane	µg/L	< 15	17	< 15	≤ 60	✓
Bromoform	µg/L	< 25	< 25	< 25	≤ 100	✓
Cadmium	mg/L	< 0.001	< 0.001	< 0.001	≤ 0.003	✓
Carbofuran	µg/L	< 1.2	< 1.2	< 1.2	≤ 7	✓
Carbon tetrachloride	µg/L	< 0.50	< 0.50	< 0.50	≤ 4	✓
Chlorate	µg/L	< 10	130	24	≤ 700	✓
Chlordane	µg/L	< 0.050	< 0.050	< 0.050	≤ 0.2	✓
Chlorine	mg/L	< 0.1	1.7	0.8	≤ 5	✓
Chlorite	µg/L	< 10	< 10	< 10	≤ 700	✓
Chloroform	µg/L	< 50	< 50	< 50	≤ 300	✓
Chlorotoluron	µg/L	< 2.5	< 2.5	< 2.5	≤ 30	✓
Chlorpyrifos	µg/L	< 7.5	< 7.5	< 7.5	≤ 30	✓

Parameter	Unit	Monitoring Data (04/2020 - 03/2021)			HKDWS	Compliance
		Minimum	Maximum	Average		
Chromium	mg/L	< 0.001	0.004	< 0.001	≤ 0.05	✓
Copper	mg/L	< 0.003	0.050	< 0.003	≤ 2	✓
Cyanazine	µg/L	< 0.15	< 0.15	< 0.15	≤ 0.6	✓
2,4-D (or 2,4-dichlorophenoxyacetic acid)	µg/L	< 7.5	< 7.5	< 7.5	≤ 30	✓
2,4-DB (or 4-(2,4-dichlorophenoxy)butyric acid)	µg/L	< 22	< 22	< 22	≤ 90	✓
DDT and metabolites	µg/L	< 0.50	< 0.50	< 0.50	≤ 1	✓
Di(2-ethylhexyl)phthalate	µg/L	< 2	< 2	< 2	≤ 8	✓
Dibromoacetonitrile	µg/L	< 0.5	0.97	< 0.5	≤ 70	✓
Dibromochloromethane	µg/L	< 25	< 25	< 25	≤ 100	✓
1,2-Dibromo-3-chloropropane	µg/L	< 0.25	< 0.25	< 0.25	≤ 1	✓
1,2-Dibromoethane	µg/L	< 0.10	< 0.10	< 0.10	≤ 0.4	✓
Dichloroacetate	µg/L	< 2	24	6.8	≤ 50	✓
Dichloroacetonitrile	µg/L	< 2.5	3.0	< 2.5	≤ 20	✓
1,2-Dichlorobenzene	µg/L	< 250	< 250	< 250	≤ 1,000	✓
1,4-Dichlorobenzene	µg/L	< 75	< 75	< 75	≤ 300	✓
1,2-Dichloroethane	µg/L	< 7.5	< 7.5	< 7.5	≤ 30	✓
1,2-Dichloroethene	µg/L	< 12	< 12	< 12	≤ 50	✓
Dichloromethane	µg/L	< 5.0	< 5.0	< 5.0	≤ 20	✓
1,2-Dichloropropane	µg/L	< 5.0	< 5.0	< 5.0	≤ 40	✓
1,3-Dichloropropene	µg/L	< 5.0	< 5.0	< 5.0	≤ 20	✓
Dichlorprop (or 2,4-DP)	µg/L	< 25	< 25	< 25	≤ 100	✓
Dimethoate	µg/L	< 1.5	< 1.5	< 1.5	≤ 6	✓
1,4-Dioxane	µg/L	< 1.5	1.8	< 1.5	≤ 50	✓
Edetic acid (EDTA)	µg/L	< 30	< 30	< 30	≤ 600	✓
Endrin	µg/L	< 0.15	< 0.15	< 0.15	≤ 0.6	✓

Parameter	Unit	Monitoring Data (04/2020 - 03/2021)			HKDWS	Compliance
		Minimum	Maximum	Average		
Epichlorohydrin	µg/L	< 0.1	< 0.1	< 0.1	≤ 0.4	✓
Ethylbenzene	µg/L	< 75	< 75	< 75	≤ 300	✓
Fenoprop (or 2,4,5-TP)	µg/L	< 2.2	< 2.2	< 2.2	≤ 9	✓
Fluoride	mg/L	< 0.1	0.70	0.49	≤ 1.5	✓
Hexachlorobutadiene	µg/L	< 0.15	< 0.15	< 0.15	≤ 0.6	✓
Hydroxyatrazine	µg/L	< 50	< 50	< 50	≤ 200	✓
Isoproturon	µg/L	< 2.0	< 2.0	< 2.0	≤ 9	✓
Lead	mg/L	< 0.001	< 0.001	< 0.001	≤ 0.01	✓
Lindane	µg/L	< 0.50	< 0.50	< 0.50	≤ 2	✓
MCPA (or (2-methyl-4-chlorophenoxy)acetic acid)	µg/L	< 2.0	< 2.0	< 2.0	≤ 2	✓
Mecoprop (or MCPP)	µg/L	< 2.5	< 2.5	< 2.5	≤ 10	✓
Mercury	mg/L	< 0.00005	< 0.00005	< 0.00005	≤ 0.006	✓
Methoxychlor	µg/L	< 5.0	< 5.0	< 5.0	≤ 20	✓
Metolachlor	µg/L	< 2.5	< 2.5	< 2.5	≤ 10	✓
Microcystin-LR (total)	µg/L	< 0.5	< 0.5	< 0.5	≤ 1	✓
Molinate	µg/L	< 1.5	< 1.5	< 1.5	≤ 6	✓
Monochloramine	mg/L	< 1.0	< 1.0	< 1.0	≤ 3	✓
Monochloroacetate	µg/L	< 2	< 2	< 2	≤ 20	✓
Nickel	mg/L	< 0.001	0.004	0.001	≤ 0.07	✓
Nitrate (as NO ₃ ⁻)	mg/L	< 2.5	12	4.2	≤ 50	✓
Nitrilotriacetic acid	µg/L	< 30	< 30	< 30	≤ 200	✓
Nitrite (as NO ₂ ⁻)	mg/L	< 0.004	0.007	< 0.004	≤ 3	✓
N-Nitrosodimethylamine	µg/L	< 0.025	< 0.025	< 0.025	≤ 0.1	✓
Pendimethalin	µg/L	< 5.0	< 5.0	< 5.0	≤ 20	✓
Pentachlorophenol	µg/L	< 2.2	< 2.2	< 2.2	≤ 9	✓

Parameter	Unit	Monitoring Data (04/2020 - 03/2021)			HKDWS	Compliance
		Minimum	Maximum	Average		
Selenium	mg/L	< 0.003	< 0.003	< 0.003	≤ 0.04	✓
Simazine	µg/L	< 0.50	< 0.50	< 0.50	≤ 2	✓
Sodium dichloroisocyanurate (as cyanuric acid)	mg/L	< 10	< 10	< 10	≤ 40	✓
Styrene	µg/L	< 5.0	< 5.0	< 5.0	≤ 20	✓
2,4,5-T (or 2,4,5- trichlorophenoxy acetic acid)	µg/L	< 2.2	< 2.2	< 2.2	≤ 9	✓
Terbutylazine	µg/L	< 1.8	< 1.8	< 1.8	≤ 7	✓
Tetrachloroethene	µg/L	< 10	< 10	< 10	≤ 40	✓
Toluene	µg/L	< 175	< 175	< 175	≤ 700	✓
Trichloroacetate	µg/L	< 2	12	4.5	≤ 200	✓
Trichloroethene	µg/L	< 18	< 18	< 18	≤ 20	✓
2,4,6-Trichlorophenol	µg/L	< 50	< 50	< 50	≤ 200	✓
Trifluralin	µg/L	< 5.0	< 5.0	< 5.0	≤ 20	✓
Uranium	mg/L	< 0.0002	0.001	< 0.0002	≤ 0.03	✓
Vinyl chloride	µg/L	< 0.20	< 0.20	< 0.20	≤ 0.3	✓
Xylenes	µg/L	< 125	< 125	< 125	≤ 500	✓

Note:

The above statistics do not include the data collected under the Enhanced Water Quality Monitoring Programme (Enhanced Programme) launched by the WSD since December 2017. The statistics of the monitoring data of the Enhanced Programme are published on the WSD's website (www.wsd.gov.hk/en/dwsewqmp) on a weekly basis.

Part C. Radiological parameters

Parameter	Unit	Monitoring Data (04/2020 - 03/2021)			HKDWS Screening Level (Note 1)	Below Screening Level
		Minimum	Maximum	Average		
Gross alpha activity	Bq/L	< 0.1	< 0.1	< 0.1	≤ 0.5	✓
Gross beta activity	Bq/L	< 0.2	< 0.2	< 0.2	≤ 1.0	✓

Note:

- (1) The screening levels for radiation in drinking water for gross alpha activity and gross beta activity are 0.5 Bq/L and 1.0 Bq/L respectively, below which no further investigation or detailed analysis for specific radionuclides is required.

Part D. Other parameters

Parameter	Unit	Monitoring Data (04/2020 - 03/2021)		
		Minimum	Maximum	Average
pH at 25 °C	pH	7.0	9.6	8.4
Colour	Hazen unit	< 5	< 5	< 5
Turbidity	NTU	< 0.1	6.2	0.2
Conductivity at 25 °C	µS/cm	62	229	159
Temperature	°C	13.0	32.9	24.9
Total alkalinity (as CaCO ₃)	mg/L	7	78	28
Total hardness (as CaCO ₃)	mg/L	< 5	69	40
Calcium	mg/L	1.2	22	13
Magnesium	mg/L	0.39	2.3	1.6
Chloride	mg/L	< 5	18	11
Sulphate	mg/L	5	26	15
Ortho-phosphates (as PO ₄)	mg/L	< 0.01	0.04	< 0.01
Iron	mg/L	< 0.01	0.27	< 0.01
Aluminium	mg/L	< 0.01	0.19	0.03
Silica (as SiO ₂)	mg/L	1.1	16	10
Manganese	mg/L	< 0.01	0.03	< 0.01

Note:

The above parameters relate to the general physical and chemical properties of the drinking water in Hong Kong. The HKDWS does not include these parameters and hence there are no standard values for them.