

Drinking Water Quality for the Period of April 2016 - March 2017

Part B. Chemicals of health significance as described by World Health Organization's Guidelines for Drinking-water Quality 2011

General Points

- Hong Kong enjoys one of the safest water supplies in the world. Since August 2012, we monitor the quality of our drinking water supply according to the World Health Organization's (WHO) Guidelines for Drinking-water Quality (2011). The WHO recommends a set of Guideline Values (GVs) representing the concentration of constituents in drinking water that will not result in any significant health risk to a consumer weighing 60 kg over a lifetime consumption of 2 litres per day for 70 years.
- Some GV's are recommended by WHO as provisional GV's. (See Note 3)
- Occasional deviations above the WHO GV's do not mean that the water is unsuitable for consumption. Large safety margins have been allowed for in the derivation of the GV's.
- In extreme cases of contamination, we will take concerted actions with the Department of Health. The public will be informed to take appropriate measures if necessary.
- Samples were taken at water treatment works, service reservoirs, connection points and publicly accessible consumer taps.
- Based on water samples taken during this period, the testing results revealed that the drinking water quality for this period complied with the World Health Organization's Guidelines for Drinking-water Quality (2011).

Parameter	Unit	Monitoring Data (04/2016 - 03/2017)			WHO 2011 Guideline Value	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 (A,T)	✓
Atrazine and its chloro-s-triazine metabolites	µg/L	< 25	< 25	< 25	100	✓
Barium	mg/L	0.003	0.018	0.013	0.7	✓
Benzene	µg/L	< 2.5	< 2.5	< 2.5	10	✓

Parameter	Unit	Monitoring Data (04/2016 - 03/2017)			WHO 2011 Guideline Value	Compliance
		Minimum	Maximum	Average		
Benzo(a)pyrene	µg/L	< 0.0020	< 0.0020	< 0.0020	0.7	✓
Boron	mg/L	< 0.02	0.04	0.02	2.4	✓
Bromate	µg/L	< 2.5	< 2.5	< 2.5	10 (A,T)	✓
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	< 175	< 175	< 175	700 (D)	✓
Chlordane	µg/L	< 0.050	< 0.050	< 0.050	0.2	✓
Chlorine	mg/L	< 0.1	1.4	0.7	5 (C)	✓
Chlorite	µg/L	< 50	< 50	< 50	700 (D)	✓
Chloroform	µg/L	< 50	< 50	< 50	300	✓
Chlorotoluron	µg/L	< 7.5	< 7.5	< 7.5	30	✓
Chlorpyrifos	µg/L	< 7.5	< 7.5	< 7.5	30	✓
Chromium	mg/L	< 0.001	< 0.001	< 0.001	0.05 (P)	✓
Copper	mg/L	< 0.003	0.039	< 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	< 25	< 25	< 25	70	✓
Dibromochloromethane	µg/L	< 25	< 25	< 25	100	✓
1,2-Dibromo-3-chloropropane	µg/L	< 0.25	< 0.25	< 0.25	1	✓

Parameter	Unit	Monitoring Data (04/2016 - 03/2017)			WHO 2011 Guideline Value	Compliance
		Minimum	Maximum	Average		
1,2-Dibromoethane	µg/L	< 0.10	< 0.10	< 0.10	0.4(P)	✓
Dichloroacetate	µg/L	< 12	14	< 12	50 (D)	✓
Dichloroacetonitrile	µg/L	< 5.0	< 5.0	< 5.0	20 (P)	✓
1,2-Dichlorobenzene	µg/L	< 250	< 250	< 250	1000 (C)	✓
1,4-Dichlorobenzene	µg/L	< 75	< 75	< 75	300 (C)	✓
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 (P)	✓
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	< 12.5	< 12.5	< 12.5	50	✓
Edetic acid (EDTA)	µg/L	< 50	< 50	< 50	600	✓
Endrin	µg/L	< 0.15	< 0.15	< 0.15	0.6	✓
Epichlorohydrin	µg/L	< 0.4	< 0.4	< 0.4	0.4 (P)	✓
Ethylbenzene	µg/L	< 75	< 75	< 75	300 (C)	✓
Fenoprop (or 2,4,5-TP)	µg/L	< 2.2	< 2.2	< 2.2	9	✓
Fluoride	mg/L	0.20	0.65	0.48	1.5	✓
Hexachlorobutadiene	µg/L	< 0.15	< 0.15	< 0.15	0.6	✓
Hydroxyatrazine	µg/L	< 50	< 50	< 50	200	✓
Isoproturon	µg/L	< 2.2	< 2.2	< 2.2	9	✓
Lead	mg/L	< 0.001	0.001	< 0.001	0.01 (A,T)	✓
Lindane	µg/L	< 0.50	< 0.50	< 0.50	2	✓
MCPA (or 4-(2-methyl-4-chlorophenoxy) acetic acid)	µg/L	< 2.0	< 2.0	< 2.0	2	✓

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		Minimum	Maximum	Average		
Mecoprop (or MCP)	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 (P)	✓
Molinate	µg/L	< 1.5	< 1.5	< 1.5	6	✓
Monochloramine	mg/L	< 1.0	< 1.0	< 1.0	3	✓
Monochloroacetate	µg/L	< 10	< 10	< 10	20	✓
Nickel	mg/L	< 0.001	0.016	0.006	0.07	✓
Nitrate (as NO ₃ ⁻)	mg/L	< 2.5	12	4.0	50	✓
Nitrilotriacetic acid	µg/L	< 50	< 50	< 50	200	✓
Nitrite (as NO ₂ ⁻)	mg/L	< 0.004	0.011	< 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 (P)	✓
Selenium	mg/L	< 0.003	< 0.003	< 0.003	0.04 (P)	✓
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 (C)	✓
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 (C)	✓
Trichloroacetate	µg/L	< 25	< 25	< 25	200	✓
Trichloroethene	µg/L	< 18	< 18	< 18	20 (P)	✓

Parameter	Unit	Monitoring Data (04/2016 - 03/2017)			WHO 2011 Guideline Value	Compliance
		Minimum	Maximum	Average		
2,4,6-Trichlorophenol	µg/L	< 50	< 50	< 50	200 (C)	✓
Trifluralin	µg/L	< 5.0	< 5.0	< 5.0	20	✓
Uranium	mg/L	< 0.0002	0.0005	< 0.0002	0.03 (P)	✓
Vinyl chloride	µg/L	< 0.2	< 0.2	< 0.2	0.3	✓
Xylenes	µg/L	< 125	< 125	< 125	500 (C)	✓

Note:

- (1) This is a summary report on drinking water quality.
- (2) All values are compiled in accordance with requirements stipulated by the current quality assurance protocol of the Water Science Division of WSD.
- (3) According to WHO 2011:
 - P = provisional guideline value because of uncertainties in the health database.
 - T = provisional guideline value as calculated guideline value is below the level that can be achieved through practical treatment methods, source protection, etc.
 - A = provisional guideline value as calculated guideline value is below the achievable quantification level.
 - D = provisional guideline value as disinfection may result in the guideline value being exceeded.
 - C = concentrations of the substance at or below the health-based guideline value may affect the appearance, taste or odour of the water, leading to consumer complaints.