Water Services (Drinking Water Standards for New Zealand) Regulations 2022

Rt Hon Dame Helen Winkelmann, Administrator of the Government

Order in Council

At Wellington this 7th day of June 2022

Present:
Her Excellency the Administrator of the Government in Council

These regulations are made under section 47 of the Water Services Act 2021—

(a) on the advice and with the consent of the Executive Council; and

(b) on the recommendation of the Minister of Local Government; and

(c) following consultation in accordance with section 53 of that Act.

Contents

Regulations

1 Title

These regulations are the Water Services (Drinking Water Standards for New Zealand) Regulations 2022.

2 Commencement

These regulations come into force on 14 November 2022.

3 Interpretation

In these regulations, unless the context otherwise requires,—

determinand means a substance or characteristic that is determined or estimated in drinking water

MAV means maximum acceptable value.

4 Drinking Water Standards

(1) The determinands listed in the first column of each table in the Schedule must not exceed the applicable maximum acceptable value specified in the second column.

(2) The maximum acceptable values in the second column of each table in the Schedule must be calculated in accordance with the notes (if any) set out in the third column.

5 Revocation

The *Drinking-water Standards for New Zealand 2005 (revised 2018)* are revoked.

Schedule
Drinking Water Standards for New Zealand

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Table 1
Maximum acceptable values for microbiological determinands

Determinand	Maximum acceptable value	Notes
Escherichia coli	Less than 1 in 100 mL of sample	
Total pathogenic protozoa	Less than 1 verified infectious (oo)cyst per 100 L of sample	

Table 2
Maximum acceptable values for inorganic determinands

Determinand	Maximum acceptable value (mg/L unless otherwise stated)	Notes
Aluminium	1	
Antimony	0.02	
Arsenic	0.01	
Barium	1.5	
Boron	2.4	
Bromate	0.01	
Cadmium	0.004	
Chlorate	0.8	
Chlorine	5	Expressed in mg/L as Cl_2
Chlorite	0.8	
Chromium	0.05	Total chromium content
Copper	2	
Cyanide	0.6	
Cyanogen chloride	0.4	
Fluoride	1.5	
Lead	0.01	
Manganese	0.4	
Mercury	0.007	Inorganic mercury only
Monochloramine	3	Expressed in mg/L as Cl_2
Nickel	0.08	
Nitrate, short-term	50	Expressed in mg/L as NO_3, or 11.3 mg/L as NO_3-N
Nitrite, short-term	3	Expressed in mg/L as NO_2
Nitrate and nitrite	Σ ratio < 1	The sum of the ratio of the concentrations of nitrate and nitrite to each of their respective MAVs must not exceed 1
Perchlorate	0.08	
Selenium	0.04	

Determinand	Maximum acceptable value (mg/L unless otherwise stated)	Notes
Uranium	0.03	

Table 3
Maximum acceptable values for organic determinands

Determinand	Maximum acceptable value (mg/L unless otherwise stated)	Notes
Acrylamide	0.0005	
Alachlor	0.02	
Aldicarb	0.01	
Aldrin + dieldrin	0.00004	The sum of both, not individually
Anatoxins (includes congeners anatoxin-a, homoanatoxin-a, dihydroanatoxin-a, dihydrohomoanatoxin-a)	0.006	Expressed as anatoxin-a toxicity equivalents
Atrazine	0.1	Sum of atrazine and its metabolites
Azinphos methyl	0.1	
Benzene	0.01	
Benzo(α)pyrene	0.0007	
Bromacil	0.4	
Bromodichloromethane	0.06	
Bromoform	0.1	
Carbofuran	0.008	
Carbon tetrachloride	0.005	
Chlordane	0.0002	
Chloroform	0.4	
Chlorotoluron	0.04	
Chlorpyriphos	0.04	
Cyanazine	0.0007	
Cylindrospermopsin	0.0008	Expressed as cylindrospermopsin toxicity equivalents
2,4-D	0.04	
2,4-DB	0.1	
DDT + isomers	0.001	Sum of all isomers
Di(2-ethylhexyl)phthalate	0.009	
1,2-dibromo-3-chloropropane	0.001	
Dibromoacetonitrile	0.08	
Dibromochloromethane	0.15	
1,2-dibromoethane	0.0004	
Dichloroacetic acid	0.05	
Dichloroacetonitrile	0.02	
1,2-dichlorobenzene	1.5	

Determinand	Maximum acceptable value (mg/L unless otherwise stated)	Notes
1,4-dichlorobenzene	0.4	
1,2-dichloroethane	0.03	
1,2-dichloroethene	0.06	Total of cis and trans isomers
Dichloromethane	0.02	
1,2-dichloropropane	0.05	
1,3-dichloropropene	0.02	Total of cis and trans isomers
Dichlorprop	0.1	
Dimethoate	0.008	
1,4-dioxane	0.05	
Diuron	0.02	
EDTA (edetic acid)	0.7	
Endrin	0.001	
Epichlorohydrin	0.0005	
Ethylbenzene	0.3	
Fenoprop	0.01	
Hexachlorobutadiene	0.0007	
Hexazinone	0.4	
Hydroxytrazine	0.3	
Isoproturon	0.01	
Lindane	0.002	
MCPA	0.8	
Mecoprop	0.01	
Metalaxyl	0.3	
Methoxychlor	0.02	
Metolachlor	0.01	
Metribuzin	0.07	
Microcystins/nodularins	0.001	Expressed as microcystin-LR toxicity equivalents
Molinate	0.007	
Monochloroacetic acid	0.02	
Nitrilotriacetic acid (NTA)	0.2	
N-Nitrosodimethylamine (NDMA)	0.0001	
Oryzalin	0.4	
Oxadiazon	0.2	
Pendimethalin	0.02	
Pentachlorophenol	0.009	
PFHxS + PFOS	0.00007	PFHxS = perfluorohexane sulfonate PFOS = perfluorooctane sulfonate MAV is the sum of both
PFOA	0.00056	PFOA = perfluorooctanoic acid
Picloram	0.2	
Pirimiphos-methyl	0.1	
Primisulfuron-methyl	0.9	

Determinand	Maximum acceptable value (mg/L unless otherwise stated)	Notes
Procymidone	0.7	
Propazine	0.07	
Pyriproxyfen	0.4	
Saxitoxins	0.003	Expressed as saxitoxin-equivalents
Simazine	0.002	
Sodium dichloroisocyanurate (as cyanuric acid)	40	
Styrene	0.03	
2,4,5-T	0.01	
Terbacil	0.04	
Terbuthylazine	0.008	
Tetrachloroethene	0.05	
Thiabendazole	0.4	
Toluene	0.8	
Trichloroacetic acid	0.2	
Trichloroethene	0.03	
2,4,6-trichlorophenol	0.2	
Triclopyr	0.1	
Trifluralin	0.03	
Trihalomethanes (THMs)	Σ ratio < 1	The sum of the ratio of the concentration of each THM to its respective MAV must not exceed 1
Vinyl chloride	0.0003	
Xylenes (total)	0.6	
1080 long-term	0.0035	
1080 short-term	0.035	

Table 4
Maximum acceptable values for radiological determinands

Determinand	Maximum acceptable value (Bq/L)	Notes
Radon	100	
Total alpha activity	0.5	Bq/L excluding radon
Total beta activity	1	Bq/L excluding potassium-40

Michael Webster,
Clerk of the Executive Council.

Explanatory note

This note is not part of the regulations, but is intended to indicate their general effect.

These regulations, which come into force on 14 November 2022, set the Drinking Water Standards for New Zealand. The standards set limits for the concentration of determinands in drinking water. The limits are referred to as maximum acceptable values (**MAVs**). The MAVs for any determinand must not be exceeded at any time. Under the Water Services Act 2021, all drinking water suppliers must ensure that the drinking water they supply complies with the standards, regardless of the nature of the source water used or the number of people served by the supply.

The standards are based in part on the World Health Organization *Guidelines for drinking-water quality: fourth edition incorporating the first and second addenda*. The standards revoke and replace the *Drinking-water Standards for New Zealand 2005 (revised 2018)*.

Issued under the authority of the Legislation Act 2019.
Date of notification in *Gazette*: 9 June 2022.
These regulations are administered by the Department of Internal Affairs.

Wellington, New Zealand:
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