

Table 1 - Microbiological Testing (Performed Under Regulation 170/03)

Type	MAC (E. Coli & Total Coloforms)	Number of Samples	Range of E. Coli Results (Min - Max)	Range of Total Coliform Results (Min - Max)	Number of HPC Samples	Range of HPC Results (Min - Max)
Raw	N/A	52	0 - 57	1 - >200	N/A	N/A
Treated	0	52	0	0	52	<10 - 100
Distribution System	0	114	0	0	55	<10 - 430

Note: Total Coliforms are an indicator of adverse water quality if detected

Table 2: Operational Testing (Performed under Schedule 7, 8, or 9 of Regulation 170/03)

Parameter	MAC	Number of Samples	Range of Results (min - max)	Parameter Description
Raw Water Turbidity (NTU)	N/A	Continuous	0.16 - 2.28	Turbidity is a measure of particles in water
Treated Water Turbidity (NTU)	N/A	Continuous	0.052 - 0.382	Turbidity is a measure of particles in water
Treated Combined Chlorine Residual (mg/L)	See Parameter Description	Continuous	1.51 - 2.48	Recommended level of at least 1.00 mg/L in distribution system to maintain microbiological quality. 0.25 mg/L minimum.
Distribution System Chloramines Residual (mg/L)	See Parameter Description	Continuous	1.09 - 2.26	Recommended level of at least 1.00 mg/L combined chlorine in distribution system to maintain microbiological quality. 0.25 mg/L combined chlorine minimum.

Note: Turbidity range determined through in house lab testing

Parameter	MAC	Number of Samples	Rande of Results (min - max)	Results Average
Filter #1 Effluent Turbidity (NTU)	1.0 for >15 minutes	Continuous	0.02 - 2.00	0.1
Filter #2 Effluent Turbidity (NTU)	1.0 for >15 minutes	Continuous	0.03 - 1.76	0.09
Filter #3 Effluent Turbidity (NTU)	1.0 for >15 minutes	Continuous	0.02 - 2.00	0.08

Note: Turbidity range determined through in house lab testing

Table 3: Backwash Wastewater Effluent Testing and Sampling

Parameter	MAC	Number of Samples	Results Average	Parameter Description
Total Suspended Solids (mg/L)	15	12	13	A measure of the particulates collected in the filtration process.

Note: Testing and sampling in accordance with the requirements of the Ministry Drinking Water Licence

Table 4: Raw Water Testing (Analyzed by Accredited Laboratories)

Parameter	MAC	Number of Samples	Results Range (min - max)	MAC Exceedance (Yes or No)	Parameter Description
Microcystin (µg/L)	1.5	22	<0.15 - 0.20	No	Naturally occurring (released from blooms of blue-green algae)

Table 5: Treated Water Schedule 23 Inorganic Parameters

Parameter	MAC	Number of Samples	Results Range (min - max)	MAC Exceedance (Yes or No)	Parameter Description
Antimony (mg/L)	0.006	1	0.0001	No	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
Arsenic (mg/L)	0.025	1	0.0002	No	Naturally occurring in surface waters / mine drainage
Barium (mg/L)	1	1	0.048	No	Erosion of natural deposits. Discharge from metal refineries, oil drilling wastes.
Boron (mg/L)	5	1	0.024	No	Erosion of natural deposits, industrial waste effluents.
Cadmium (mg/L)	0.005	1	0.000015	No	Industrial discharge
Chromium (mg/L)	0.05	1	<0.002	No	Industrial residues
Mercury (mg/L)	0.001	1	<0.00002	No	Erosion of natural deposits, industrial discharges.
Selenium (mg/L)	0.01	1	< 0.001	No	Discharge from refineries, mines, chemical manufacture
Uranium (mg/L)	0.02	1	<0.000005	No	Erosion of natural deposits.

Table 6: Treated Water Schedule 24 Inorganic Parameters

Parameter	MAC	Number of Samples	Results Range (min - max)	MAC Exceedance (Yes or No)	Parameter Description
Alachlor (µg/L)	5	1	<0.3	No	Agricultural herbicide
Atrazine + N-Dealkylated Metabolites (µg/L)	5	1	<0.5	No	Agricultural herbicide
Azinphos-methyl (µg/L)	20	1	<1	No	Insecticide
Benzene (µg/L)	5	1	<0.5	No	Discharge from plastics manufacturing, leaking fuel tanks
Benzo(a)pyrene (µg/L)	0.01	1	<0.006	No	Formed from the incomplete burning of organic matter.
Bromoxynil (µg/L)	5	1	<0.5	No	Agricultural herbicide
Carbaryl (µg/L)	90	1	<3	No	Agricultural/Forestry/ Household insecticide
Carbofuran (µg/L)	90	1	<1	No	Agricultural insecticide
Carbon Tetrachloride (µg/L)	5	1	<0.2	No	Discharge from chemical and industrial activities
Chlorpyrifos (µg/L)	90	1	<0.5	No	Agricultural/ Household insecticide
Diazinon (µg/L)	20	1	<1	No	Agricultural/ Livestock Operation/ Residential insecticide

Parameter	MAC	Number of Samples	Results Range (min - max)	MAC Exceedance (Yes or No)	Parameter Description
Dicamba ($\mu\text{g/L}$)	120	1	<10	No	Agricultural herbicide
1,2-Dichlorobenzene ($\mu\text{g/L}$)	200	1	<0.5	No	Discharge from industrial chemical factories
1,4-Dichlorobenzene ($\mu\text{g/L}$)	5	1	<0.5	No	Discharge from industrial chemical factories
1,2-Dichloroethane ($\mu\text{g/L}$)	5	1	<0.5	No	Discharge from industrial chemical factories
1,1-Dichloroethylene ($\mu\text{g/L}$)	14	1	<0.5	No	Discharge from industrial chemical factories
Dichloromethane ($\mu\text{g/L}$)	50	1	<5	No	Discharge from pharmaceutical and chemical factories
2,4-Dichlorophenol ($\mu\text{g/L}$)	900	1	< 0.2	No	Industrial contamination/ reaction with chlorine
2,4-Dichlorophenoxy Acetic Acid ($\mu\text{g/L}$)	100	1	<10	No	Agricultural/ Residential herbicide
Diclofop-methyl ($\mu\text{g/L}$)	9	1	<0.9	No	Agricultural herbicide
Dimethoate ($\mu\text{g/L}$)	20	1	<1	No	Agricultural/ Livestock Operation/ Forestry insecticide
Diquat ($\mu\text{g/L}$)	70	1	<5	No	Agricultural/ Aquatic herbicide

Parameter	MAC	Number of Samples	Results Range (min - max)	MAC Exceedance (Yes or No)	Parameter Description
Diuron ($\mu\text{g/L}$)	150	1	<5	No	Agricultural/ Industrial/ herbicide
Glyphosate ($\mu\text{g/L}$)	280	1	<25	No	Agricultural/Forestry/ Household herbicide
Malathion ($\mu\text{g/L}$)	190	1	<5	No	Fruit & Vegetable / pest control insecticide
2-methyl-4-chlorophenoxyacetic Acid ($\mu\text{g/L}$)	0.1	1	< 0.010	No	Leaching and/or runoff from agricultural and other uses
Metolachlor ($\mu\text{g/L}$)	50	1	<3	No	Agricultural herbicide
Metribuzin ($\mu\text{g/L}$)	80	1	<3	No	Agricultural herbicide
Monochlorobenzene ($\mu\text{g/L}$)	80	1	<0.5	No	Discharge from industrial and agricultural chemical factories and dry cleaning facilities
Paraquat ($\mu\text{g/L}$)	10	1	<1	No	Agricultural/ Aquatic herbicide
Pentachlorophenol ($\mu\text{g/L}$)	60	1	<0.2	No	Pesticide/ wood preservative residue
Phorate ($\mu\text{g/L}$)	2	1	<0.3	No	Agricultural insecticide
Picloram ($\mu\text{g/L}$)	190	1	<15	No	Industrial herbicide

Parameter	MAC	Number of Samples	Results Range (min - max)	MAC Exceedance (Yes or No)	Parameter Description
Polychlorinated Biphenyls (µg/L)	3	1	<0.05	No	Residue from various industrial uses
Prometryne (µg/L)	1	1	<0.1	No	Agricultural herbicide
Simazine (µg/L)	10	1	<0.5	No	Agricultural herbicide or its residue
Terbufos (µg/L)	1	1	<0.5	No	Agricultural insecticide
Tetrachloroethylene (µg/L)	30	1	<0.5	No	Leaching from PVC pipes; discharge from factories, dry cleaners and auto shops (metal degreaser)
2,3,4,6-Tetrachlorophenol (µg/L)	100	1	<0.2	No	Wood preservative
Triallate (µg/L)	230	1	<10	No	Agricultural herbicide
Trichloroethylene (µg/L)	5	1	<0.5	No	Discharge from metal degreasing sites and other factories
2,4,6-Trichlorophenol (µg/L)	5	1	<0.2	No	Pesticide manufacturing
Trifluralin (µg/L)	45	1	<0.5	No	Agricultural herbicide
Vinyl Chloride (µg/L)	2	1	<0.2	No	Leaching from PVC pipes; discharge from plastics factories

Table 7: Other Regulatory Treated Water Parameters

Parameter	MAC	Number of Samples	Results Range (min - max)	MAC Exceedance (Yes or No)	Parameter Description
Fluoride (mg/L)	1.5	1	<0.1	No	Naturally occurring.
Nitrite (mg/L)	1	4	<0.1	No	A natural component of water at this level.
Nitrate (mg/L)	10	4	<0.1 - 0.1	No	Runoff from fertilizer use, erosion of natural deposits
Sodium (mg/L)	20	1	10.2	No	Occurs naturally in the earth's crust. Notification is required every 60 months if greater than 20 mg/L

Table 8: Treated Water Testing (Analyzed by Accredited Laboratories)

Parameter	MAC	Number of Samples	Results Range (min - max)	MAC Exceedance (Yes or No)	Parameter Description
Microcystin (µg/L)	1.5	22	<0.15	No	Naturally occurring (released from blooms of blue-green algae)

Table 9: Regulatory Distribution Water Testing (Analyzed by Accredited Laboratories)

Parameter	MAC	Number of Samples	Results Range (min - max)	MAC Exceedance (Yes or No)	Parameter Description
Alkalinity CaCO ₃ (mg/L)	N/A	8	102 - 117	No	A measure of the resistance of the water to the effects of acids. Expressed as calcium carbonate.
Total Haloacetic Acids (mg/L)	0.08 (Annual avg.)	5	0.016 - 0.022	No	By-product of drinking water disinfection with chlorine. Based on a running annual average
pH	6.5–8.5 OG	7	7.17 - 7.72	No	An indicator of the acidity of water.
Total Trihalomethanes (µg/L)	100 (Annual avg.)	4	24 - 28	No	By-product of chlorination. * The MAC for THMs of 100 µg/L is based on a running annual average.
Lead (mg/L)	N/A	7	0.00006 - 0.00084	No	Internal corrosion of household plumbing, erosion of natural deposits.

Table 10: Raw Water Testing (Analyzed by In House Laboratory)

Parameter	MAC	Number of Samples	Average Results	MAC Exceedance (Yes or No)	Parameter Description
UV Transmittance (%)	N/A	114	68.4 - 88.5	No	A measure of the percentage of transmittance of UV light

Table 11: Treated Water Testing (Analyzed by In House Laboratory)

Parameter	MAC	Number of Samples	Average Results	MAC Exceedance (Yes or No)	Parameter Description
Aluminum (mg/L)	0.1	99	0.002 - 0.181	No	May be naturally present or a residual from the coagulation process. There is no MAC for this parameter. It is an Operational Guideline (OG).
Free Ammonia (mg/L)	N/A	113	0.09 - 0.40	No	Residual from the addition of Ammonium Sulphate for the secondary disinfection process
Monochloramines (mg/L)	3	118	1.55 - 2.48	No	Chloramines are produced when ammonia is added to chlorinated water during the disinfection process.
UV Transmittance (%)	N/A	114	81.5 - 96.4	No	UV transmittance is a measure of the percentage of transmittance of UV light