

Halton Region
Distribution Water System
2024 Analytical Averages

Schedule 1 - Microbiological Parameters

Analysis	Unit	MECP MAC Standard	MECP Aesthetic Objective	MECP Operationa l Guideline	Detection Limit	Acton Distribution	Burlington Distribution	Campbellville Distribution	Georgetown Distribution Well Based	Georgetown Distribution Lake Based	Milton Distribution Well Based	Milton Distribution Lake Based	Oakville Distribution	Bridgeview Distribution	North Aldershot Distribution	Snake Road Distribution
Presence/Absence - <i>E. coli</i>	P/A/100 mL	Absent			NA	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
Presence/Absence - Total Coliform	P/A/100 mL	Absent			NA	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
Heterotrophic Plate Count	CFU/1 mL			500 ²	0	0	1	1	1	1	1	1	0	0	8	6
Chlorine - Free	mg/L	0.05 - 4.0		0.2	0.01	1.18	1.07	1.18	1.29	1.26	1.23	1.12	1.04			
Chlorine - Total	mg/L				0.01	1.31	1.25	1.30	1.42	1.42	1.36	1.28	1.20	1.31	1.15	1.07
Chlorine - Combined	mg/L	0.25 - 3.0		1.0	0.01									1.25 *	1.08 *	1.00 *

Table 4 - Chemical / Physical Parameters

Alkalinity	mg/L			30 - 500	2.0	263	92.6	314	261	95.8	255	94.5	92.8	85.6	89.8	86.2
Ammonia Nitrogen	mg/L				0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.30	0.33	0.12
Calcium	mg/L				0.5	102	41.5	101	110	40.4	89.1	42.9	40.8	39.3	39.6	38.4
Chloride	mg/L		250		1.0	72.9	28.9	167	105	35.7	88.7	30.0	30.0	30.4	29.9	30.7
Colour	TCU		5		1	1	1	1	1	1	1	1	1	1	1	1
Conductivity	µS/cm				1.5	726	324	1120	874	376	794	330	328	332	333	333
Dissolved Organic Carbon	mg/L		5		0.40	1.3	1.6	0.89	0.74	1.6	0.93	1.6	1.6	1.7	1.7	1.7
pH				6.5 - 8.5	1.00	7.35	7.76	7.45	7.50	7.89	7.53	7.94	7.75	7.53	7.60	7.54
Sulphate	mg/L		500		10	24.4	23.2	21.5	38.6	25.1	36.8	23.0	23.0	22.3	22.1	22.1
TKN (Total Kjeldhal Nitrogen)	mg/L				0.1	0.2	0.1	0.1	0.2	<0.1	0.2	0.2	0.2	0.5	0.5	0.3
Total Dissolved Solids	mg/L		500		25	446	179	619	523	196	451	191	181	186	198	207
Total Hardness	mg/L			80 - 100	1.5	326	124	325	341	126	313	126	124	121	125	123
(for Dishwashers)	grains/gal					22.9	8.7	22.8	23.9	8.8	22.0	8.8	8.7	8.5	8.8	8.6
Aluminum	mg/L			0.1	0.002	0.003	0.070	0.003	<0.002	0.034	0.003	0.058	0.071	0.061	0.127	0.049
Cobalt	mg/L				0.0005	<0.0005	<0.0005	<0.0005	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Copper	mg/L		1		0.001	0.047	0.002	0.005	0.002	0.003	0.003	0.007	0.003	0.002	0.002	0.001
Iron	mg/L		0.3		0.001/0.10	0.020	0.034	0.037	0.019	<0.10	0.032	0.065	0.042	0.032	0.107	0.104
Manganese	mg/L		0.05		0.0005/0.0020	0.0008	0.0010	0.0010	0.0008	<0.0020	0.0010	0.0033	0.0012	0.0015	0.0021	0.0033
Molybdenum	mg/L				0.0005	0.0008	0.0014	0.0005	0.0005	0.0011	0.0009	0.0012	0.0012	0.0013	0.0015	0.0014
Nickel	mg/L				0.001	0.001	0.001	0.001	0.001	<0.001	0.001	0.001	0.001	<0.001	0.001	<0.001
Zinc	mg/L		5		0.001	0.019	0.003	0.004	0.002	0.007	0.002	0.004	0.003	0.001	<0.001	0.002

Schedule 13 - Chemical Parameters

Fluoride	mg/L	1.5		0.5 - 0.8 ³	0.02	0.65	0.67	0.09	0.68	0.66	0.11	0.64	0.62	0.71	0.69	0.71
Nitrate Nitrogen	mg/L	10			0.04	1.77	0.35	1.19	1.83	0.31	0.40	0.37	0.38	0.40	0.37	0.41
Nitrite Nitrogen	mg/L	1			0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	0.02	0.04
Sodium	mg/L	20 ⁴	200 ⁵		1.0	34.1	16.4	117	58.2	17.1	48.7	17.9	16.8	15.8	15.7	15.6
Turbidity	NTU	1 ⁶	5 ⁷		0.05	0.07	0.09	0.10	0.10	0.07	0.09	0.16	0.11	0.22	0.58	0.61
Bromodichloromethane ⁹	µg/L				0.10	10.1	7.9	4.3	3.1	10.8	6.5	10.9	7.7	8.6	7.9	8.1
Bromoform ⁹	µg/L				0.20	0.5	0.6	0.7	2.4	0.8	5.2	0.8	0.6	0.3	0.3	0.3
Chloroform ⁹	µg/L				0.10	18.3	15.9	5.6	1.3	20.3	2.9	21.4	13.2	11.6	10.8	11.0
Dibromochloromethane ⁹	µg/L				0.20	4.4	4.3	3.6	4.9	6.0	10.4	6.0	4.6	4.0	3.7	3.8
Total THMs (RAA)	µg/L	100 ⁸			0.20	38.2	31.4 ¹⁰	15.3	12.4	31.4 ¹⁰	27.1	31.4 ¹⁰	31.4 ¹⁰	23.0	21.7	21.8
Dibromoacetic Acid ⁹	µg/L				5.0		6.7		6.9	5.4		6.6	6.6	6.9	5.6	5.7
Dichloroacetic Acid ⁹	µg/L				5.0		7.4		<5.0	11.0		11.0	7.4	5.0	5.1	<5.0
Monobromoacetic Acid ⁹	µg/L				5.0		<5.0		<5.0	<5.0		<5.0	<5.0	<5.0	<5.0	<5.0
Monochloroacetic Acid ⁹	µg/L				5.0		<5.0		<5.0	<5.0		<5.0	<5.0	<5.0	<5.0	<5.0
Trichloroacetic Acid ⁹	µg/L				5.0		5.6		<5.0	6.8		6.6	5.3	<5.0	<5.0	<5.0
Total HAAs (RAA)	µg/L	80 ⁸			5.0		14.8 ¹⁰		8.7	14.8 ¹⁰		14.8 ¹⁰	14.8 ¹⁰	8.3	5.7	5.7

Schedule 23 - Inorganic Parameters

Cadmium	mg/L	0.005			0.0005	<0.0005	<0.0005	<0.0005	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Chromium	mg/L	0.05			0.001 / 0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001	<0.001	<0.001

DEFINITIONS:

MECP = Ministry of the Environment, Conservation and Parks

MAC = Maximum Acceptable Concentration

THM = Trihalomethanes

HAA = Haloacetic acids

RAA = Running Annual Average

NOTES:

¹ This is an internal Halton Region guideline and is not reportable to the MECP if adverse.

² This is an internal Halton Region guideline and is not reportable to the MECP if adverse. Increases in HPC concentrations above baseline levels are considered undesirable.

³ This guideline applies only when Fluoride is added. Campbellville and Milton Well Based do not have Fluoride added to the water supply.

⁴ Defined as adverse under Reg. 170/03. At 20 mg/L, the Medical Officer of Health is to be notified, who in turn notifies local physicians so that patients on sodium restricted diets can be informed.

⁵ At 200 mg/L, MECP Aesthetic Objective.

⁶ This standard applies to treated water entering the distribution system.

⁷ This objective applies to water in the distribution system.

⁸ This standard applies to a Running Annual Average (RAA) for all distribution sites, as per MECP calculation.

⁹ This result is based on an Annual Average.

¹⁰ This is a Running Annual Average (RAA) for all distribution sites, as per MECP calculation within Oakville, Burlington, Milton Lake Based and Georgetown Lake Based.

* This system operates under chloramination.

Schedule 23 and 24 from the Ontario Drinking Water Quality Standards Reg. 169/03 and 170/03 have been analyzed for all treated waters entering the distribution system,

where required, and were found to be below the MAC health standard or aesthetic objective required.

To convert mg/L to grains/gallon: mg/L x 0.07016 = grains/imperial gallon