

Drinking Water Quality Report for Ebbsfleet Supply Zone ZTW0501

Areas covered by Report:	Ebbsfleet, London
Report Period:	01 January 2019 to 31 December 2019
Upstream Zone:	Thames Water South Darenth WSZ (Z0091)
Population:	1580
Notices:	n/a

Commentary on Water Quality

The water supplied to the Ebbsfleet zone originates from a ground water source that is chlorinated. The analysis results indicate the quality of the water supplied to this zone is very good with no contraventions recorded or detected during 2019.

There were 2 customer contacts concerning "Taste and Odour" during the period of this report. The investigations by IWNL concluded that the water supplied was compliant with regulations.

Hardness Rating:	The water supplied to this zone is classified as hard as it contains naturally elevated concentrations of calcium and magnesium.					
	Soft	Moderately Soft	Slightly Hard	Moderately Hard	Hard	Very Hard
CaCO ₃ mg/l	0-50	50-100	100-150	150-200	200-300	300+

Microbiological Indicators

Parameter	units of measurement	Number of Samples	Minimum	Maximum	Average	Prescribed Concentration or Value
Coliform Bacteria (Indicator)	No. 100/ml	13	0	0	0.0	0
E.coli (faecal coliforms Confirmed)	No. 100/ml	13	0	0	0.0	0
Enterococci (Confirmed)	No. 100/ml	4	0	0	0.0	0
Sulphite-reducing Clostridia (Confirmed)	No. 100/ml	4	0	0	0.0	0

Physio-Chemical Parameters

Parameter	units of measurement	Number of Samples	Minimum	Maximum	Average	Prescribed Concentration or Value
Ammonium (Total)	mg/l NH ₄	4	0.004	0.004	0.0040	0.5
Boron	mg/l B	4	0.03	0.04	0.037	1
Bromate	ug/l BrO ₃	4	0.1	0.1	0.10	10
Chloride	mg/l	4	32.6	34.7	33.28	250
Colour	mg/l Pt/Co	4	1	1	1.00	20
Cyanide (Total)	ug/l CN	4	0.7	0.9	0.75	50

Physio-Chemical Parameters continued

Parameter	units of measurement	Number of Samples	Minimum	Maximum	Average	Prescribed Concentration or Value
Electrical Conductivity	uS/cm @ 20 C	5	625	659	639.6	2500
Fluoride (Total)	mg/l F	4	0.1	0.13	0.118	1.5
Free Residual Chlorine	mg/l	12	0.31	0.52	0.40	No Specific PCV
Hydrogen ion	pH value	5	7.05	7.17	7.114	6.5-9.5
Nitrate (Total)	mg/l NO3	4	37.8	39.3	38.48	50
Nitrite - Consumer's Taps	mg/l NO3	4	0.002	0.003	0.0023	0.5
Nitrite/Nitrate formula	No Units	4	0.76	0.79	0.773	1
Sodium	mg/l Na	4	17.1	19.4	17.95	200
Sulphate	mg/l SO4	4	23.2	28.4	25.68	250
Total Residual Chlorine	mg/l	13	0.36	0.56	0.463	No Specific PVC
Turbidity (CT)	FTU	5	0.08	0.16	0.124	4

Hydrocarbons / Organics

Parameter	units of measurement	Number of Samples	Minimum	Maximum	Average	Prescribed Concentration or Value
1 1 1-Trichloroethane (Total)	ug/l	4	0.04	0.04	0.040	0.1
1 2-Dichloroethane (Total)	ug/l	4	0.07	0.07	0.070	3
Benzene (Total)	ug/l	4	0.02	0.02	0.020	1
Benzo[a]Pyrene (Total)	ug/l	4	0.00022	0.00022	0.000220	0.01
Benzo[b]Fluoranthene (Total)	ug/l	4	0.00052	0.00052	0.000520	The sum of PAHs must be <0.1 ug/l
Benzo[ghi]Perylene (Total)	ug/l	4	0.0004	0.0004	0.000400	The sum of PAHs must be <0.1 ug/l
Benzo[k]Fluoranthene (Total)	ug/l	4	0.00047	0.00047	0.000470	The sum of PAHs must be <0.1 ug/l
Bromodichloromethane (Total)	ug/l	4	0.98	1.22	1.113	60
ChloroDibromomethane (Total)	ug/l	4	2.09	2.7	2.410	100
Indeno[1 2 3-cd]Pyrene (Total)	ug/l	4	0.00048	0.00048	0.000480	The sum of PAHs must be <0.1 ug/l
Polycyclic Aromatic Hydrocarbons (Total by Calculation)	ug/l	4	0	0.01	0.005	0.1
Tetrachloroethene (Total)	ug/l	4	0.05	0.17	0.115	10
Tetrachloromethane (Total)	ug/l	4	0.02	0.02	0.020	3
Total Organic Carbon	mg/l C	4	0.6	0.8	0.68	NO ABNORMAL CHANGE
Total Trichloroethene & Tetrachloroethene (Total by Calculation)	ug/l	3	0.16	0.22	0.2	100

Hydrocarbons / Organics continued

Parameter	units of measurement	Number of Samples	Minimum	Maximum	Average	Prescribed Concentration or Value
Tribromomethane-Bromoform (Total)	ug/l	4	1.98	2.93	2.445	100
Trichloroethene (Total)	ug/l	3	0.05	0.16	0.107	10
Trichloromethane-Chloroform (Total)	ug/l	4	0.3	0.5	0.350	300
Trihalomethanes (Total by Calculation)	ug/l	4	5.12	6.83	6.090	100

Metals

Parameter	units of measurement	Number of Samples	Minimum	Maximum	Average	Prescribed Concentration or Value
Aluminium (Total)	ug/l Al	4	7.22	7.22	7.220	200
Antimony	ug/l Sb	4	0.047	0.06	0.054	5
Arsenic (Total)	ug/l As	4	0.15	0.44	0.250	10
Cadmium (Total)	ug/l Cd	4	0.006	0.013	0.0113	5
Chromium (Total)	ug/l Cr	4	0.33	0.63	0.438	50
Copper (Total)	mg/l Cu	4	0.0194	0.476	0.17705	2
Iron (Total)	ug/l Fe	5	0.7	8.13	2.832	200
Lead (10)	ug/l Pb	4	0.19	1.19	0.495	10
Manganese (Total)	ug/l Mn	4	0.22	0.32	0.268	50
Mercury (Total)	ug/l Hg	4	0.02	0.05	0.030	1
Nickel (Total)	ug/l Ni	4	1.17	10.4	3.813	20
Selenium (Total)	ug/l Se	4	0.7	1.71	1.01	10

Organoleptic Parameters

Parameter	units of measurement	Number of Samples	Minimum	Maximum	Average	Prescribed Concentration or Value
Odour (Quantitative)	Dilution Number	5	0	0	0.0	0
Taste(Quantitative)	Dilution Number	5	0	0	0.0	0

Radioactivity Parameters						
Parameter	units of measurement	Number of Samples	Minimum	Maximum	Average	Prescribed Concentration or Value
Gross Alpha	Bq/l	5	0.023	0.039	0.03	0.1
Gross Beta	Bq/l	5	0.053	0.071	0.062	1
Tritium	Bq/l	5	5	5	5.00	100
Radon	Bq/l	4	4.37	10	8.5925	100

Glossary of Terms

Term	Definition
PCV	Prescribed Concentration or Value
mg/l	Milligrammes per Litre or parts per million
µg/l	Microgrammes per Litre or parts per billion
Pt/Co	Platinum/Cobalt
µS/cm	Micro Siemens per Centimetre
Bq/l	Becquerel per Litre
NTU	Nephelometric Turbidity Units