

Drinking Water Quality Report for Crawley Supply Zone ZSW0101

Areas covered by Report:	Crawley
Report Period:	01 January 2019 to 31 December 2019
Upstream Zone:	Southern Water Turners Hill WSZ (ZS524)
Population:	1343
Notices:	n/a

Commentary on Water Quality

The water supplied to the Crawley Zone originates from a mixed 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.

IWNL received 1 customer contact concerning "Taste and Odour" during the period of this report. The investigation 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	3	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	3	0.004	0.004	0.0040	0.5
Boron	mg/l B	4	0.03	0.05	0.034	1
Bromate	ug/l BrO ₃	4	0.4	1.2	0.78	10
Chloride	mg/l	3	32.7	36.8	35.03	250
Colour	mg/l Pt/Co	3	1	1.3	1.10	20
Cyanide (Total)	ug/l CN	4	0.7	0.7	0.70	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	3	325	394	357.7	2500
Fluoride (Total)	mg/l F	4	0.06	0.09	0.078	1.5
Free Residual Chlorine	mg/l	12	0.21	0.49	0.35	No Specific PCV
Hydrogen ion	pH value	3	7.46	7.79	7.670	6.5-9.5
Nitrate (Total)	mg/l NO3	4	9.82	23	16.31	50
Nitrite - Consumer's Taps	mg/l NO3	4	0.002	0.002	0.0020	0.5
Nitrite/Nitrate formula	No Units	4	0.2	0.46	0.325	1
Sodium	mg/l Na	4	19.4	23.6	21.50	200
Sulphate	mg/l SO4	3	23.8	28.2	26.13	250
Total Residual Chlorine	mg/l	13	0.38	0.63	0.481	No Specific PVC
Turbidity (CT)	FTU	3	0.1	0.18	0.147	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	0.18	0.105	0.1
1 2-Dichloroethane (Total)	ug/l	4	0.07	0.13	0.108	3
Benzene (Total)	ug/l	4	0.02	0.07	0.038	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	9.22	18.37	13.730	60
ChloroDibromomethane (Total)	ug/l	4	9.36	12.25	10.933	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	0.003	0.02	0.011	0.1
Tetrachloroethene (Total)	ug/l	4	0.05	0.39	0.170	10
Tetrachloromethane (Total)	ug/l	4	0.02	0.14	0.060	3
Total Organic Carbon	mg/l C	3	1.5	2.2	1.93	NO ABNORMAL CHANGE
Total Trichloroethene & Tetrachloroethene (Total by Calculation)	ug/l	4	0	0	0.0	100

Hydrocarbons / Organics continued

Parameter	units of measurement	Number of Samples	Minimum	Maximum	Average	Prescribed Concentration or Value
Tribromomethane-Bromoform (Total)	ug/l	4	1.66	4.9	2.770	100
Trichloroethene (Total)	ug/l	4	0.05	0.34	0.148	10
Trichloromethane-Chloroform (Total)	ug/l	4	5.81	37.28	21.728	300
Trihalomethanes (Total by Calculation)	ug/l	4	32.19	68.26	49.163	100

Metals

Parameter	units of measurement	Number of Samples	Minimum	Maximum	Average	Prescribed Concentration or Value
Aluminium (Total)	ug/l Al	4	7.22	21.3	14.073	200
Antimony	ug/l Sb	4	0.06	0.14	0.110	5
Arsenic (Total)	ug/l As	4	0.33	0.36	0.348	10
Cadmium (Total)	ug/l Cd	4	0.005	0.013	0.0110	5
Chromium (Total)	ug/l Cr	4	0.29	0.7	0.493	50
Copper (Total)	mg/l Cu	4	0.0039	0.0095	0.00753	2
Iron (Total)	ug/l Fe	4	1.53	4.02	2.925	200
Lead (10)	ug/l Pb	4	0.02	0.08	0.058	10
Manganese (Total)	ug/l Mn	4	0.41	1.83	0.940	50
Mercury (Total)	ug/l Hg	4	0.03	0.03	0.030	1
Nickel (Total)	ug/l Ni	4	1.86	3.67	2.698	20
Selenium (Total)	ug/l Se	4	0.18	0.29	0.2175	10

Organoleptic Parameters

Parameter	units of measurement	Number of Samples	Minimum	Maximum	Average	Prescribed Concentration or Value
Odour (Quantitative)	Dilution Number	3	0	0	0.0	0
Taste(Quantitative)	Dilution Number	3	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	0.016	0.034	0.0246	0.1
Gross Beta	Bq/l	5	0.075	0.114	0.0906	1

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