

### **Monitoring your drinking water supply**

The area we supply is divided into 21 smaller water supply areas called Water Supply Zones. SES Water have 8 water treatment works and each supply zone is supplied by one or more of these treatment works.

Properties in North Looe supply zone are supplied from our Cheam treatment works.

To monitor the quality of the water we supply, we take and test a number of drinking water samples from treatment works and from randomly selected customer properties in each water supply zone.

The number of samples collected, and the types of tests carried out, are specified in the Water Supply (Water Quality) Regulations 2016 (as amended) and our regulator, the Drinking Water Inspectorate, also reviews our performance.

The following pages list the regulatory sample results we have taken from within the zone and from the treatment works supplying the zone.

**In 2022, all the Regulatory sample results for this Water Supply Zone complied with the requirements of the Water Supply (Water Quality) Regulations 2016 (as amended).**

## Helpful facts:

### Hardness

To help you set your domestic appliances, the average hardness results from our 2022 operational monitoring programme are shown in different units below:

Calcium (mg/l)	Calcium Carbonate (mg/l)	Millimols	Degrees		
			German (°dH)	French (°f)	°Clark (or °e)
83.2	208	2.08	11.65	20.85	14.56

mg/l = milligrammes per litre is the same as parts per million (ppm)

### Chlorine

Chlorine is used to disinfect the water supply and make sure there are no harmful bacteria in the water. We also add a small amount of ammonia to form monochloramine, which has a less noticeable chlorine taste and odour. The chlorine results in the tables below are as monochloramine, which is also known as Residual Disinfectant.

### Fluoride

We do not add fluoride to our drinking water supplies. There is, however, approximately 0.15 mg/l naturally occurring fluoride present.

### Nitrate

The average nitrate level in this supply zone is 32.6 mg/l. This nitrate comes from the source waters supplying the treatment works. The PCV (Prescribed Concentration Value), or allowable limit, for nitrate in drinking water is 50 mg/l.

### Other tests

In addition to the tests listed in the Regulations, water companies also carry out extra tests for monitoring purposes. The following average results for this supply zone may also be of interest:

<b>Alkalinity</b>	169	mg/l HCO <sub>3</sub>
<b>Magnesium</b>	3.2	mg/l Mg
<b>Total Dissolved Solids</b>	287	ppm (calculated based on conductivity measurement)

## Drinking Water Quality Summary Report for 2022

## ZL20 – North Looe Supply Zone

The table below summarises the results of tests carried out on water samples taken within the **North Looe supply zone**.

Test	No. of Samples taken	Standard	Unit of Measure	Samples Contravening Standard		Concentration or Value Detected		
				No.	%	Minimum	Average	Maximum
1,2-Dichloroethane	8	3	µg/l	0	0	<0.08	<0.08	<0.08
Aluminium	8	200	µg Al/l	0	0	<5	<5	<5
Ammonium	36	0.5	mg NH <sub>4</sub> /l	0	0	<0.02	<0.06	0.08
Antimony	8	5	µg Sb/l	0	0	0.11	0.111	0.13
Arsenic	8	10	µg As/l	0	0	0.22	0.24	0.26
Benzene	8	1	µg/l	0	0	<0.01	<0.01	0.01
Benzo(a)pyrene	8	0.01	µg/l	0	0	<0.001	<0.001	<0.001
Boron	8	1	mg B/l	0	0	0.04	0.05	0.05
Cadmium	8	5	µg Cd/l	0	0	<0.06	<0.06	<0.06
Chromium	8	50	µg Cr/l	0	0	<0.8	<0.8	<0.8
Coliforms	120	0	No/100ml	0	0	0	0	0
Colony Count 72h at 22°C	36	N/A	No/1ml	0	0	0	< 1	2
Colour	36	20	mg/l Pt/Co	0	0	<1.6	<1.6	<1.6
Copper	8	2	mg Cu/l	0	0	<0.03	<0.08	0.16
E. coli	120	0	No/100ml	0	0	0	0	0
Enterococci	8	0	No/100ml	0	0	0	0	0
Iron	8	200	µg Fe/l	0	0	<6	<6	<6
Lead	8	10	µg Pb/l	0	0	<0.3	<2.47	6.43
Manganese	8	50	µg Mn/l	0	0	<0.9	<0.9	<0.9
Nickel	8	20	µg Ni/l	0	0	1.34	2.07	5.11
Nitrate	36	50	mg NO <sub>3</sub> /l	0	0	29.6	32.6	35
Nitrite	36	0.5	mg NO <sub>2</sub> /l	0	0	<0.005	<0.02	0.05
Nitrite/Nitrate formula	36	1		0	0	0.6	0.7	0.7
Odour (Quantitative)	36	N/A	Dil. Num.	0	0	0	0	0
pH (Hydrogen ion)	36	6.5 - 9.5	pH units	0	0	7.44	7.65	7.76
Residual Disinfectant (Total Chlorine as monochloramine)	120	-	mg/l	0	0	0.07	0.21	0.28
Selenium	8	10	µg Se/l	0	0	1.12	1.19	1.30
Sodium	8	200	mg Na/l	0	0	14.5	15.0	16.1
Sum Tetra- & Trichloroethene	8	10	µg/l	0	0	0.32	0.39	0.5
Taste (Quantitative)	36	N/A	Dil. Num.	0	0	0	0	0
Tetrachloromethane	8	3	µg/l	0	0	<0.11	<0.11	<0.11
Total PAH (4 Substances)	8	0.1	µg/l	0	0	0	0	0
Total Trihalomethanes	8	100	µg/l	0	0	1.7	2.5	3.0
Turbidity	36	4	NTU	0	0	<0.06	<0.07	0.18

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## SSCTW – Cheam TW Supply Point

The table below summarises the results of tests carried out on water samples taken from **Cheam treatment works**, which supplies properties in the North Looe supply zone.

Test	No. of Samples taken	Standard	Unit of Measure	Samples Contravening Standard		Concentration or Value Detected		
				No.	%	Minimum	Average	Maximum
Aldrin	8	0.03	µg/l	0	0	<0.007	<0.007	<0.007
Atrazine	8	0.1	µg/l	0	0	0.018	0.02	0.021
Azoxystrobin	8	0.1	µg/l	0	0	<0.014	<0.014	<0.014
Boscalid	8	0.1	µg/l	0	0	<0.01	<0.01	<0.01
Bromate	8	10	µg BrO3/l	0	0	<0.8	<0.8	<0.8
Carbendazim	8	0.1	µg/l	0	0	<0.004	<0.004	<0.004
Carbetamide	8	0.1	µg/l	0	0	<0.004	<0.004	<0.004
Chloride	8	250	mg Cl/l	0	0	26.3	27.5	29.3
Chlorotoluron	8	0.1	µg/l	0	0	<0.003	<0.003	<0.003
Clostridium perfringens	8	0	No/100ml	0	0	0	0	0
Conductivity	156	2500	uS/cm	0	0	373	428	599
Cyanide	8	50	µg CN/l	0	0	<4.1	<4.1	<4.1
Dieldrin	8	0.03	µg/l	0	0	<0.007	<0.007	<0.007
Diflufenican	8	0.1	µg/l	0	0	<0.005	<0.005	<0.005
Dimethenamid	8	0.1	µg/l	0	0	<0.005	<0.005	<0.005
Diuron	8	0.1	µg/l	0	0	<0.006	<0.006	<0.006
Epoxiconazole	8	0.1	µg/l	0	0	<0.007	<0.007	<0.007
Flufenacet	8	0.1	µg/l	0	0	<0.006	<0.006	<0.006
Fluoride	8	1.5	mg F/l	0	0	0.13	0.15	0.17
Flutriafol	8	0.1	µg/l	0	0	<0.004	<0.004	<0.004
Heptachlor	8	0.03	µg/l	0	0	<0.008	<0.008	<0.008
Heptachlor Epoxide	8	0.03	µg/l	0	0	<0.005	<0.005	<0.005
Isoproturon	8	0.1	µg/l	0	0	<0.005	<0.005	<0.005
Mercury	8	1	µg Hg/l	0	0	<0.04	<0.04	<0.04
Metazchlor	8	0.1	µg/l	0	0	<0.002	<0.002	<0.002
Methabenzthiazuron	8	0.1	µg/l	0	0	<0.002	<0.002	<0.002
Pendimethalin	8	0.1	µg/l	0	0	<0.009	<0.009	<0.009
Picloram	8	0.1	µg/l	0	0	<0.004	<0.005	0.007
Propyzamide	8	0.1	µg/l	0	0	<0.001	<0.001	<0.001
Prosulfocarb	8	0.1	µg/l	0	0	<0.001	<0.001	<0.001
Simazine	8	0.1	µg/l	0	0	<0.007	<0.008	0.009
Sulphate	8	250	mg SO4/l	0	0	34.9	37	42.6
Tebuconazole	8	0.1	µg/l	0	0	<0.004	<0.004	<0.004
Total Organic Carbon	8	N/A	mg C/l	0	0	0.5	0.6	0.6
Total Pesticides	8	0.5	µg/l	0	0	0.018	0.025	0.029
Tri-Allate	8	0.1	µg/l	0	0	<0.01	<0.01	<0.01