Water Quality Report for Drift

Monitoring Water Quality

The Government requires all water companies to comply with the Water Supply (Water Quality) Regulations. These regulations are based upon the European Drinking Water Directive and some even more strict UK National standards.

The Regulations dictate how water quality must be monitored; they stipulate the number of samples to be taken and where they should be taken from. They also tell us what parameters we must look for in these samples, including certain characteristics, elements or substances.

South West Water's region is divided into a number of supply zones. A Water Supply zone is defined in order to enable the mandatory sampling programme to be undertaken at the correct frequency per populous. Each zone is a geographical area containing no more than 100,000 permanent residents.

Water Quality Parameters and their Standards

All of the parameters have standards associated with them, which incorporate a large safety margin in order to protect public health. The standard is usually a maximum value, but some minimum levels are set.

Most of the standards are mandatory and are referred to as a 'Prescribed Concentration or Value' (PCV). Some additional standards called 'Indicator Parameters' are set in order to monitor water treatment and distribution processes.

Any sample result which fails to meet with a standard requires thorough investigation; a detailed assessment is made and prompt remedial action is taken to prevent reoccurrence. This assessment is reported to the industry's independent regulator; The Drinking Water Inspectorate (DWI).

Water Quality Report

Supply Zone Information Summary

Zone Name: **Drift** Zone Id: **ZC1** Population: **49363**

1. Parishes Supplied in the Supply Zone

LUDGVAN, MADRON, MARAZION, MORVAH, PAUL, PENZANCE, SANCREED, SENNEN, ST BURYAN, ST ERTH, ST IVES (PENWITH), ST JUST (PENWITH), ST LEVAN, ST MICHAEL'S MOUNT nb no supply, TOWEDNACK, ZENNOR

2. Water Treatment Works Supplying the whole or part of the Supply Zone;

DRIFT WTW, RESTORMEL WTW, STITHIANS WTW

3. Service Reservoirs located within the Supply Zone;

BOSAVERN SERVICE RESERVOIR, CRYOR SERVICE RESERVOIR, DING DONG SERVICE RESERVOIR, FOXPARK (NEW) SERVICE RESERVOIR, FOXPARK SERVICE RESERVOIR, KERRIS (CHYWOONE) SERVICE RESERVOIR, LEHA SERVICE RESERVOIR, LUDGVAN SERVICE RESERVOIR, STEEPLE SERVICE RESERVOIR, TOLROY SERVICE RESERVOIR, TREVU SERVICE RESERVOIR

Service Reservoirs provide short-term storage for treated water enabling continuity of supply during peak demand and as a provision of emergency use such as fire fighting.

4. Health Care Professionals associated with the Supply Zone;

Cornwall Council, South West Peninsula Health Protection Unit - Cornwall and Isles of Scilly Health Protection Team

Summary Of Test Results for ZC1

Period: 01/01/2019 to 31/12/2019

Mandatory European Standards							
Parameter	**Unit**	**PCV**	**Number of Samples Taken in Period**	**% Exceeding PCV**	**Min**	**Mean**	**Max**
1 2-Dichloroethane	ug/l	3	11	0	0.10	0.11	0.20
Antimony	ug/l	5	11	0	0.05	0.19	0.26
Arsenic	ug/l	10	11	0	0.20	0.26	0.43
Benzene	ug/l	1	11	0	0.10	0.11	0.20
Benzo(a)Pyrene	ng/l	10	11	0	0.30	0.32	0.50
Bromate	ug/l	10	11	0	0.10	0.15	0.40
Cadmium	ug/l	5	11	0	0.04	0.17	0.25
Chromium	ug/l	50	11	0	0.40	0.40	0.40
Copper	mg/l	2	10	0	0.000950	0.01	0.0417
Cyanide	ug/l	50	6	0	1	1.05	1.30
E.coli	no/100ml	0	125	0	0	0	0
Enterococci	no/100ml	0	11	0	0	0	0
Fluoride	mg/l	1.5	24	0	0.0360	0.06	0.0930
Lead	ug/l	10	10	0	0.05	0.70	5.22
Mercury	ug/l	1	23	0	0.02	0.03	0.14
Nickel	ug/l	20	10	0	1	2.46	6.52
Nitrate as NO3	mg/l	50	11	0	2.46	13.89	21.21
Nitrite as NO2	mg/l	0.5	11	0	0.0050	0.01	0.0050
Selenium	ug/l	10	11	0	0.31	0.41	0.52
Total Pesticides	ug/l	0.5	28	0	0	0	0.0050
Total THM	ug/l	100	11	0	30.20	48.36	71.20
Total Trichlorethene + Tetrachloroethene	ug/l	10	11	0	0	0	0

Mandatory National Standards							
Parameter	**Unit**	**PCV**	**Number of Samples Taken in Period**	**% Exceeding PCV**	**Min**	**Mean**	**Max**
Aluminium	ug/l	200	39	0	3.26	7.32	14.30
Colour as Pt/Co	mg/l	20	39	0	0.20	0.43	1.70
Iron	ug/l	200	39	0	4	11.09	37.60
Manganese	ug/l	50	39	0	0.20	1.59	5.03
Odour (Quantitative)	DN	0	39	0	0	0	0
Sodium	mg/l	200	11	0	8.30	16.01	19
Taste (Quantitative)	DN	0	39	0	0	0	0
Tetrachloromethane	ug/l	3	11	0	0.10	0.11	0.20
Turbidity	NTU	4	39	0	0.11	0.17	0.25

Indicator Parameters							
Parameter	**Unit**	**PCV**	**Number of Samples Taken in Period**	**% Exceeding PCV**	**Min**	**Mean**	**Max**
Ammonium as NH4	mg/l	0.5	39	0	0.02	0.02	0.03
C. perfringens	no/100ml	0	305	0	0	0	0
Chloride	mg/l	250	24	0	17	26.54	39
Coliform	no/100ml	0	125	0	0	0	0
Conductivity at 20 'C	uS/cm	2500	306	0	61.80	156.80	304
pH	pH units	6.5 to 9.5	39	0	7.50	7.96	8.50
Sulphate	mg/l	250	24	0	12.10	31.54	55.40
Total Organic Carbon	mg/l		21	0	0.65	0.92	1.71
TVC at 22 for 3 days	no/ml		125	0	0	1.32	37
TVC at 37 for 2 days	no/ml		125	0	0	1.42	37

Other Parameters not covered by the Regulations							
Parameter	**Unit**	**PCV**	**Number of Samples Taken in Period**	**% Exceeding PCV**	**Min**	**Mean**	**Max**
Chlorine Free (On Site)	mg/l		126	0	0.05	0.36	0.74
Chlorine Total (On Site)	mg/l		126	0	0.12	0.42	0.78
Hardness Total as Ca	mg/l		18	0	14.20	26.76	39.60

Other Parameters not covered by the Regulations							
Parameter	**Unit**	**PCV**	**Number of Samples Taken in Period**	**% Exceeding PCV**	**Min**	**Mean**	**Max**
Phosphorus	ug/l		50	0	11	688.82	1939

Reference;

1000 ug (micrograms) = 1 mg (milligram)
1000 mg = 1 g (gram)
1000 g = 1 kg (kilogram)
1000 ml (millilitres) = 1 l (litre)
Therefore;
1 ug/l is 1 microgram per litre
1 mg/l is 1 milligram per litre

NTU - Nephelometric Turbidity Unit
DN - Dilution Number - The Laboratory Panel uses DN as a reporting value, however the standard is 'acceptable to customers and no abnormal change'