Water Quality Report for WATER INTO SUPPLY ZONE LITTLEHEMPSTON AND TOTTIFORD

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: **WATER INTO SUPPLY ZONE LITTLEHEMPSTON AND TOTTIFORD** Zone Id: **ZPL10** Population: **77177**

1. Parishes Supplied in the Supply Zone

COCKINGTON WITH CHELSTON, COFFINSWELL, ELLACOMBE, HACCOMBE WITH COMBE, KINGSKERSWELL, SHALDON, SHIPHAY (Part), ST MARYCHURCH (Part) #1, STOKEINTEIGNHEAD, TORMOHUN

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

LITTLEHEMPSTON WTW, TOTTIFORD WTW, VENFORD WTW

3. Service Reservoirs located within the Supply Zone;

CHAPEL HILL SERVICE RESERVOIR, GALLOWS GATE SERVICE RESERVOIR, GREAT HILL SERVICE RESERVOIR, MILBER SERVICE RESERVOIR, SHALDON (NEW) SERVICE RESERVOIR, WARBERRY 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;

South West Peninsula Health Protection Unit - Devon Health Protection Team, Teignbridge District Council, Torbay Borough Council

Summary Of Test Results for ZPL10

Period: 01/01/2022 to 31/12/2022

Mandatory European Standards							
Parameter	**Unit**	**PCV**	**Number of Samples Taken in Period**	**% Exceeding PCV**	**Min**	**Mean**	**Max**
1 2-Dichloroethane	ug/l	3	12	0	0.20	0.24	0.70
Antimony	ug/l	5	12	0	0.05	0.10	0.17
Arsenic	ug/l	10	12	0	0.62	0.62	0.62
Benzene	ug/l	1	12	0	0.20	0.20	0.20
Benzo(a)Pyrene	ng/l	10	11	0	0.50	0.50	0.50
Cadmium	ug/l	5	12	0	0.06	0.06	0.06
Chromium	ug/l	50	12	0	0.80	0.80	0.80
Copper	mg/l	2	11	0	0.0019	0.01	0.0293
E.coli	no/100ml	0	776	0	0	0	0
Enterococci	MPN/100ml	0	2	0	0	0	0
Enterococci	no/100ml	0	10	0	0	0	0
Fluoride	mg/l	1.5	38	0	0.0220	0.07	0.10
Lead	ug/l	10	11	0	0.08	0.18	0.9320
Nickel	ug/l	20	11	0	3.30	3.30	3.30
Nitrate as NO3	mg/l	50	12	0	3.51	3.66	4.46
Nitrite as NO2	mg/l	0.5	12	0	0.0170	0.02	0.0170
Selenium	ug/l	10	12	0	0.52	1.03	1.20
Total Pesticides	ug/l	0.5	42	0	0	0	0.0070
Total THM	ug/l	100	12	0	27.30	47.46	69.10
Total Trichlorethene + Tetrachloroethene	ug/l	10	12	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	55	0	7.34	15.50	30.40
Colour as Pt/Co	mg/l	20	55	0	0.80	0.95	2

Mandatory National Standards							
Parameter	**Unit**	**PCV**	**Number of Samples Taken in Period**	**% Exceeding PCV**	**Min**	**Mean**	**Max**
Iron	ug/l	200	55	0	7.60	10.12	53.90
Manganese	ug/l	50	55	0	0.30	0.49	1.31
Odour (Quantitative)	DN	0	55	0	0	0	0
Sodium	mg/l	200	12	0	12	20.75	28
Taste (Quantitative)	DN	0	55	0	0	0	0
Tetrachloromethane	ug/l	3	12	0	0.20	0.20	0.20
Turbidity	NTU	4	55	0	0.07	0.09	0.17

Indicator Parameters							
Parameter	**Unit**	**PCV**	**Number of Samples Taken in Period**	**% Exceeding PCV**	**Min**	**Mean**	**Max**
Ammonium as NH4	mg/l	0.5	55	0	0.08	0.08	0.08
C. perfringens	no/100ml	0	357	0	0	0	0
Chloride	mg/l	250	37	0	10	18.08	33
Coliform	no/100ml	0	776	0	0	0	0
Conductivity at 20 'C	uS/cm	2500	355	0	65	141.49	265
pH	pH units	6.5 to 9.5	55	0	7.90	8.28	8.90
Sulphate	mg/l	250	37	0	3.30	13.76	36.70
Total Organic Carbon	mg/l		37	0	0.42	1.04	4.30
TVC at 22 for 3 days	no/ml		194	0	0	4.87	300
TVC at 37 for 2 days	no/ml		194	0	0	4.30	300

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		194	0	0.06	0.47	0.99
Chlorine Total (On Site)	mg/l		194	0	0.11	0.54	1.01
Hardness Total as Ca	mg/l		62	0	3.90	10.94	19.30
Phosphorus	ug/l		38	0	637	827.76	1075

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'