



Water Quality Report for WATER INTO SUPPLY ZONE RESTORMEL EAST

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 RESTORMEL EAST** Zone Id: **ZCW7** Population: **96138**

1. Parishes Supplied in the Supply Zone

COLAN, CREED, FOWEY, GRAMPOUND, LANHYDROCK, LANIVET, LANLIVERY, LOSTWITHIEL, LUXULYAN, MAWGAN IN PYDER, MEVAGISSEY, NEWLYN, ROCHE, ST AUSTELL, ST BLAISE nb also ST BLAZEY, ST COLUMB MAJOR, ST DENNIS, ST ENODER, ST ERVAN, ST EVAL, ST EWE, ST GORAN, ST MERRYLN, ST MEWAN, ST MICHAEL CAERHAYS, ST SAMPSONS, ST STEPHEN IN BRANNEL, ST WENN, TREVERBYN, TYWARDREATH

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

DE LANK WTW, RESTORMEL WTW

3. Service Reservoirs located within the Supply Zone;

BEARS DOWN SERVICE RESERVOIR, BODELVA SERVICE RESERVOIR, BUNNY SERVICE RESERVOIR, CARN GREY SERVICE RESERVOIR, CHARK HILL SERVICE RESERVOIR, COSWARTH SERVICE RESERVOIR, FOXPARK (NEW) SERVICE RESERVOIR, FOXPARK SERVICE RESERVOIR, GLUVIAN SERVICE RESERVOIR, GORRAN TOWER SERVICE RESERVOIR, GRAMPOUND SERVICE RESERVOIR, GREAT WINDMILL SERVICE RESERVOIR, HIGH STREET NO. 2 SERVICE RESERVOIR, HIGHGATE SERVICE RESERVOIR, HORNICK SERVICE RESERVOIR, KILGOGUE SERVICE RESERVOIR, PINNOCK SERVICE RESERVOIR, RACECOURSE SERVICE RESERVOIR, ROCHE SERVICE RESERVOIR, ST. DENNIS SERVICE RESERVOIR, TREGISKEY SERVICE RESERVOIR, TRENANCE 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 ZCW7

Period: 01/01/2023 to 31/12/2023


Mandatory European Standards							
Parameter	Unit	PCV	Number of Samples Taken in Period	% Exceeding PCV	Min	Mean	Max
1,2-Dichloroethane	ug/l	3	9	0	0.20	0.20	0.20
Antimony	ug/l	5	9	0	0.10	0.10	0.10
Arsenic	ug/l	10	9	0	0.62	0.62	0.62
Benzene	ug/l	1	9	0	0.20	0.20	0.20
Benzo(a)Pyrene	ng/l	10	11	0	0.50	0.50	0.50
Bromate	ug/l	10	9	0	0.10	0.10	0.10
Cadmium	ug/l	5	9	0	0.06	0.07	0.1050
Chromium	ug/l	50	9	0	0.80	0.80	0.80
Copper	mg/l	2	12	0	0.0019	0.01	0.0226
E.coli	no/100ml	0	984	0	0	0	0
Enterococci	MPN/100ml	0	9	0	0	0	0
Fluoride	mg/l	1.5	26	0	0.10	0.10	0.10
Lead	ug/l	10	12	0	0.09	0.12	0.2240
Nickel	ug/l	20	12	8.30	3.30	8.84	69.80
Nitrate as NO ₃	mg/l	50	9	0	3.82	5.91	8.4170
Nitrite as NO ₂	mg/l	0.5	9	0	0.0120	0.02	0.0170
Selenium	ug/l	10	9	0	1.20	1.20	1.20
Total Pesticides	ug/l	0.5	25	0	0	0	0.0010
Total THM	ug/l	100	9	0	23	30.50	46.10
Total Trichloroethene + Tetrachloroethene	ug/l	10	9	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	78	0	4.90	18.28	37.10
Colour as Pt/Co	mg/l	20	81	0	2	2.01	2.80

Mandatory National Standards							
Parameter	Unit	PCV	Number of Samples Taken in Period	% Exceeding PCV	Min	Mean	Max
Iron	ug/l	200	78	0	7.60	13.54	74.10
Manganese	ug/l	50	78	0	0.6340	2.29	15.80
Odour (Quantitative)	DN	0	78	0	0	0	0
Sodium	mg/l	200	9	0	9	10.57	18
Taste (Quantitative)	DN	0	78	0	0	0	0
Tetrachloromethane	ug/l	3	9	0	0.20	0.20	0.20
Turbidity	NTU	4	78	0	0.07	0.11	0.88

Indicator Parameters							
Parameter	Unit	PCV	Number of Samples Taken in Period	% Exceeding PCV	Min	Mean	Max
Ammonium as NH4	mg/l	0.5	76	0	0.0150	0.08	0.08
C. perfringens	no/100ml	0	336	0	0	0	0
Chloride	mg/l	250	27	0	15	19.93	27
Coliform	no/100ml	0	984	0	0	0	0
Conductivity at 20 °C	uS/cm	2500	337	0	93	135.88	196
pH	pH units	6.5 to 9.5	78	0	7.20	7.76	8.40
Sulphate	mg/l	250	26	0	4	12.75	27.10
Total Organic Carbon	mg/l		25	0	0.65	1.05	1.79
TVC at 22 for 3 days	no/ml		246	0	0	0.13	10
TVC at 37 for 2 days	no/ml		246	0	0	0.31	36

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		246	0	0.04	0.48	0.80
Chlorine Total (On Site)	mg/l		246	0	0.06	0.53	0.80
Hardness Total as Ca	mg/l		24	0	7.80	14.62	24.30
Phosphorus	ug/l		38	0	16	22.37	258



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'