

Drinking Water Quality Report for Rutland Supply Zone ZAW0104

Areas covered by Report:	Priors Hall, Corby and Longcroft Road, Corby
Report Period:	01 January 2019 to 31 December 2019
Upstream Zone:	Anglian Water Beanfield WSZ (ZRW53) Anglian Water Northampton East WSZ (ZRW18)
Population:	5001
Notices:	Undertaking IWN3466 in relation to Total Pesticides and Metaldehyde in the bulk supply provided. This scheme is progressing according to the action plan.

Commentary on Water Quality

The water supplied to the Rutland Zone originates from a surface water source that is chloraminated. The analysis results indicate the quality of the water supplied to this zone is very good with no contraventions recorded or detected during 2019.

There was 1 customer contact concerning "Taste" and 1 customer contact concerning "Appearance" during the period of this report. The investigations 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	27	0	0	0.0	0
E.coli (faecal coliforms Confirmed)	No. 100/ml	27	0	0	0.0	0
Enterococci (Confirmed)	No. 100/ml	13	0	0	0.0	0
Sulphite-reducing Clostridia (Confirmed)	No. 100/ml	13	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	14	0.050	0.170	0.1155	0.5
Boron	mg/l B	13	0.10	0.11	0.104	1
Bromate	ug/l BrO ₃	13	0.1	2.5	1.08	10
Chloride	mg/l	14	68.6	79.1	74.53	250
Colour	mg/l Pt/Co	14	1	2.5	1.16	20
Cyanide (Total)	ug/l CN	14	0.7	14	3.11	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	14	639	717	676.7	2500
Fluoride (Total)	mg/l F	14	0.28	0.32	0.301	1.5
Free Residual Chlorine	mg/l	26	0.04	0.7	0.22	No Specific PCV
Hydrogen ion	pH value	14	7.17	7.62	7.351	6.5-9.5
Nitrate (Total)	mg/l NO3	15	14.7	27.4	20.80	50
Nitrite - Consumer's Taps	mg/l NO3	15	0.002	0.126	0.0386	0.5
Nitrite/Nitrate formula	No Units	13	0.3	0.56	0.423	1
Sodium	mg/l Na	13	45.9	52.5	49.94	200
Sulphate	mg/l SO4	13	118	129	124.92	250
Total Residual Chlorine	mg/l	27	0.31	0.89	0.506	No Specific PVC
Turbidity (CT)	FTU	14	0.14	0.42	0.222	4

Hydrocarbons / Organics

Parameter	units of measurement	Number of Samples	Minimum	Maximum	Average	Prescribed Concentration or Value
1 1 1-Trichloroethane (Total)	ug/l	8	0.04	0.18	0.098	0.1
1 2-Dichloroethane (Total)	ug/l	8	0.07	0.13	0.100	3
Benzene (Total)	ug/l	8	0.02	0.07	0.036	1
Benzo[a]Pyrene (Total)	ug/l	8	0.00022	0.00022	0.000220	0.01
Benzo[b]Fluoranthene (Total)	ug/l	8	0.00052	0.00052	0.000520	The sum of PAHs must be <0.1 ug/l
Benzo[ghi]Perylene (Total)	ug/l	8	0.0004	0.00047	0.000409	The sum of PAHs must be <0.1 ug/l
Benzo[k]Fluoranthene (Total)	ug/l	8	0.0004	0.00047	0.000461	The sum of PAHs must be <0.1 ug/l
Bromodichloromethane (Total)	ug/l	8	2.41	4.8	3.509	60
ChloroDibromomethane (Total)	ug/l	8	6.61	11.54	8.295	100
Indeno[1 2 3-cd]Pyrene (Total)	ug/l	8	0.00048	0.00048	0.000480	The sum of PAHs must be <0.1 ug/l
Polycyclic Aromatic Hydrocarbons (Total by Calculation)	ug/l	8	0	0.002	0.001	0.1
Tetrachloroethene (Total)	ug/l	8	0.05	0.39	0.161	10
Tetrachloromethane (Total)	ug/l	8	0.02	0.14	0.058	3
Total Organic Carbon	mg/l C	13	3	3.8	3.35	NO ABNORMAL CHANGE
Total Trichloroethene & Tetrachloroethene (Total by Calculation)	ug/l	8	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	8	4.13	6.85	4.988	100
Trichloroethene (Total)	ug/l	8	0.05	0.34	0.141	10
Trichloromethane-Chloroform (Total)	ug/l	8	0.41	1.94	1.206	300
Trihalomethanes (Total by Calculation)	ug/l	8	13.97	25.14	17.996	100

Metals

Parameter	units of measurement	Number of Samples	Minimum	Maximum	Average	Prescribed Concentration or Value
Aluminium (Total)	ug/l Al	14	3.21	11.2	7.038	200
Antimony	ug/l Sb	13	0.3	0.37	0.345	5
Arsenic (Total)	ug/l As	13	0.32	0.38	0.352	10
Cadmium (Total)	ug/l Cd	13	0.003	0.038	0.0142	5
Chromium (Total)	ug/l Cr	13	0.13	0.51	0.317	50
Copper (Total)	mg/l Cu	15	0.0012	0.224	0.04323	2
Iron (Total)	ug/l Fe	14	27	51	36.067	200
Lead (10)	ug/l Pb	14	0.04	0.21	0.109	10
Manganese (Total)	ug/l Mn	14	0.14	1.32	0.339	50
Mercury (Total)	ug/l Hg	13	0.03	0.03	0.030	1
Nickel (Total)	ug/l Ni	14	2.15	4.33	3.006	20
Selenium (Total)	ug/l Se	13	0.09	0.26	0.1575	10

Organoleptic Parameters

Parameter	units of measurement	Number of Samples	Minimum	Maximum	Average	Prescribed Concentration or Value
Odour (Quantitative)	Dilution Number	13	0	0	0.0	0
Taste(Quantitative)	Dilution Number	13	0	0	0.0	0

Notes

1. For some parameters, monitoring occurs at the supplying Water Treatment Works rather than the Water Supply Zone.

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
