BRIGHOUSE 2004 (4801503) WATER SUPPLY ZONE.

COMMENTARY ON WATER QUALITY

The water supplied to the zone is classified as being soft water, which is river/reservoir derived. As we have a grid system in place whereby we can move water around the Yorkshire region as required, occasionally the hardness of your water may vary.

No fluoride is added to the water. Any fluoride that is there is naturally occurring.

Samples taken in the period showed that the water complied in most respects with the prescribed standards.

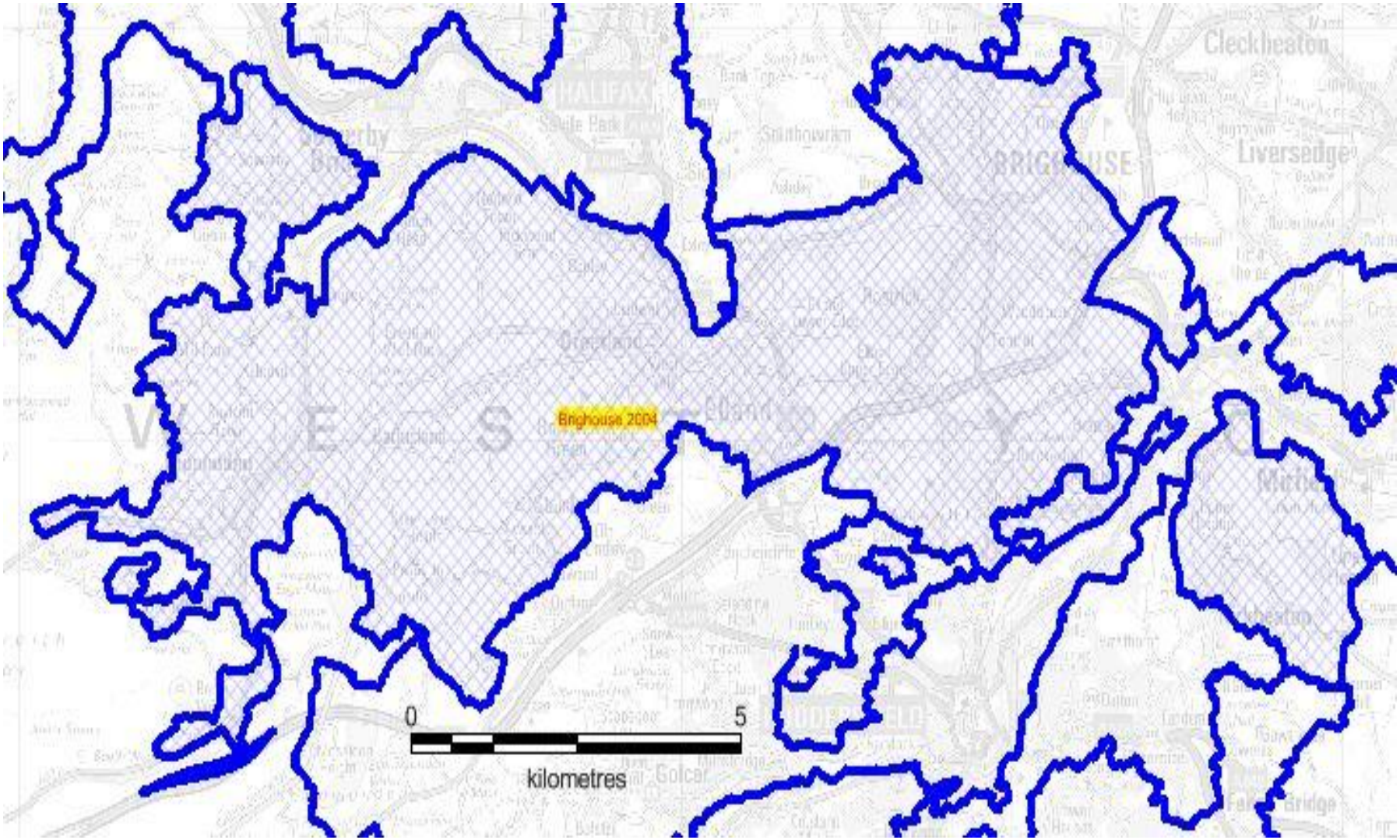
The infringements in respect of Iron were minor. One of the infringements was attributed to the deterioration of localised distribution main and the build-up of historic mains sediments in that main that supplies the failing property. A cyclical flush has been implemented and if required the section of main will be put forward to the technical distribution team for remediation to provide a permanent solution.

The infringements noted present no hazard to public health.

DETAILS OF UNDERTAKINGS AND NOTICES APPLICABLE

No Undertakings or Notices apply during the period.

The geographical area covered by this Water Supply Zone is show below:



Yorkshire Water Services **Reporting Period: 01-01-2018 to 31-12-2018**

Water Supply Zone: Brighouse 2004 **Population 85114**

ParameterName:	Std	Und Std	Units	No of Samples taken	No of Fails	% Fails	No of Fails (Und)	% Fails (Und)	Min	Mean	Max
Colony Counts After 3 Days At 22øc	-		no'/ml	76	0	0.00%	0	0.00%	0	0.1	2
E. coli	0		no'/100 ml	216	0	0.00%	0	0.00%	0	0	0
Enterococci	0		no'/100 ml	8	0	0.00%	0	0.00%	0	0	0
Residual Disinfectant - Free	-		mg/l	216	0	0.00%	0	0.00%	0.01	0.36	0.71
Residual Disinfectant - Total	-		mg/l	216	0	0.00%	0	0.00%	0.07	0.44	0.78
Total coliforms(Indicator)	0		no'/100 ml	216	0	0.00%	0	0.00%	0	0	0
1,2 Dichloroethane	3		µg/l	8	0	0.00%	0	0.00% <	0.07 <	0.1 <	0.07
Aluminium	200		µg Al/l	76	0	0.00%	0	0.00% <	3.21 <	6.818	18.2
Ammonium(ammonia and ammonium ions)	0.5		mg NH4/l	76	0	0.00%	0	0.00% <	0.004 <	0.0047	0.037
Antimony	5		µg Sb/l	8	0	0.00%	0	0.00% <	0.07 <	0.1225	0.25
Arsenic	10		µg As/l	8	0	0.00%	0	0.00% <	0.06 <	0.1362	0.17
Benzene	1		µg/l	8	0	0.00%	0	0.00% <	0.02 <	0.02 <	0.02
Benzo 3,4 pyrene	0.01		ug/l	9	0	0.00%	0	0.00% <	0.00022 <	0.0002 <	0.00022
Boron	1		mg B/l	8	0	0.00%	0	0.00% <	0.00919 <	0.0143	0.015
Bromate	10		µg BrO3/l	8	0	0.00%	0	0.00% <	0.1 <	0.4125	1
Cadmium	5		µg Cd/l	8	0	0.00%	0	0.00% <	0.007 <	0.0134	0.025
Chloride	250		mg Cl/l	8	0	0.00%	0	0.00%	19.8	33.2	47
Chromium	50		µg Cr/l	8	0	0.00%	0	0.00%	0.19	0.2762	0.46
Colour	20		mg/l Pt/Co scale	76	0	0.00%	0	0.00% <	1 <	1.13	2
Conductivity	2500		µS/cm	76	0	0.00%	0	0.00%	135	181.95	299
Copper	2		mg Cu/l	8	0	0.00%	0	0.00%	0.0008	0.0059	0.0254
Cyanide	50		µg CN/l	8	0	0.00%	0	0.00% <	0.7 <	0.7 <	0.7
Fluoride	1.5		mg F/l	8	0	0.00%	0	0.00%	0.04	0.049	0.06
Hydrogen Ion (pH)	6.5 - 9.5		pH value	76	0	0.00%	0	0.00%	6.99	7.63	9.22
Iron	200		µg Fe/l	76	2	2.63%	0	0.00%	3.76	35.48	438
Lead	10		µg/l	8	0	0.00%	0	0.00% <	0.02 <	0.204	0.71
Manganese	50		µg Mn/l	76	0	0.00%	0	0.00% <	0.14 <	1.07	19.8
Mercury	1		µg Hg/l	8	0	0.00%	0	0.00% <	0.02 <	0.031 <	0.05
Nickel	20		µg Ni/l	8	0	0.00%	0	0.00%	0.83	1.601	3.99
Nitrate	50		mg NO3/l	8	0	0.00%	0	0.00%	1.17	1.855	2.26
Nitrite - Consumer's Taps	0.5		mg/l NO2	8	0	0.00%	0	0.00% <	0.002 <	0.002 <	0.002
Nitrite/ Nitrate formula	1		mg/l	8	0	0.00%	0	0.00% <	0.37 <	0.37 <	0.37

Water Supply Zone: Brighouse 2004 **Population 85114**

ParameterName:	Std	Und Std	Units	No of Samples taken	No of Fails	% Fails	No of Fails (Und)	% Fails (Und)	Min	Mean	Max
Odour	0		dilution number	76	0	0.00%	0	0.00%	0	0	0
Polycyclic Aromatic Hydrocarbons (PAHs)	0.1		µg/l	8	0	0.00%	0	0.00%	0	0.0002	0.001
Selenium	10		µg Se/l	8	0	0.00%	0	0.00% <	0.16 <	0.219	0.41
Sodium	200		mg Na/l	8	0	0.00%	0	0.00%	13.9	21.1	30.3
Sulphate	250		mg SO4/l	8	0	0.00%	0	0.00%	16.6	24.8375	33.9
Taste	0		dilution number	76	0	0.00%	0	0.00%	0	0	0
Tetrachloroethene/Trichlorethene - Sum	10		µg/l	8	0	0.00%	0	0.00%	0	0	0
Tetrachloromethane	3		µg/l	8	0	0.00%	0	0.00% <	0.02 <	0.02 <	0.02
Total organic carbon	-		mg C/l	8	0	0.00%	0	0.00%	1.2	1.437	1.8
Total Trihalomethanes (THM's)	100		µg/l	8	0	0.00%	0	0.00%	26.69	33.9425	40.67
Turbidity	4		NTU	76	0	0.00%	0	0.00%	0.08	0.191	0.79
Calcium	-		mg Ca/l	8	0	0.00%	0	0.00%	9.51	11.13	13
Magnesium	-		mg Mg/l	8	0	0.00%	0	0.00%	1.81	2.1162	2.43
Total Hardness	-		mg Ca/l	8	0	0.00%	0	0.00%	12.5	14.625	16.9
2,4,5-T	0.1		µg/l	8	0	0.00%	0	0.00% <	0.004 <	0.0045	0.005
2,4-D	0.1		µg/l	8	0	0.00%	0	0.00% <	0.003 <	0.0039	0.005
2,4-DB	0.1		µg/l	8	0	0.00%	0	0.00% <	0.004 <	0.0048	0.006
Aldrin	0.03		µg/l	8	0	0.00%	0	0.00% <	0.003 <	0.003 <	0.003
Atrazine	0.1		µg/l	8	0	0.00%	0	0.00% <	0.001 <	0.0016 <	0.002
Bentazone	0.1		µg/l	8	0	0.00%	0	0.00% <	0.001 <	0.0015	0.002
Bromacil	0.1		µg/l	8	0	0.00%	0	0.00% <	0.003 <	0.003 <	0.003
Bromoxynil	0.1		µg/l	8	0	0.00%	0	0.00% <	0.003 <	0.0032	0.005
Carbetamide	0.1		µg/l	8	0	0.00%	0	0.00% <	0.002 <	0.002 <	0.002
Chlorpropham	0.1		µg/l	8	0	0.00%	0	0.00% <	0.003 <	0.003 <	0.003
Chlorpyrifos	0.1		µg/l	8	0	0.00%	0	0.00% <	0.002 <	0.0029 <	0.003
Chlortoluron	0.1		µg/l	8	0	0.00%	0	0.00% <	0.002 <	0.0023 <	0.003
Clomazone	0.1		µg/l	8	0	0.00%	0	0.00% <	0.002 <	0.0026 <	0.003
Clopyralid	0.1		µg/l	8	0	0.00%	0	0.00% <	0.003 <	0.0038 <	0.005
Cyanazine	0.1		µg/l	8	0	0.00%	0	0.00% <	0.001 <	0.0018 <	0.002
Cypermethrin	0.1		µg/l	8	0	0.00%	0	0.00% <	0.002 <	0.0023 <	0.003
Cyproconazole	0.1		µg/l	8	0	0.00%	0	0.00% <	0.001 <	0.0016 <	0.002
Diazinon	0.1		µg/l	8	0	0.00%	0	0.00% <	0.001 <	0.0018 <	0.003
Dicamba	0.1		µg/l	8	0	0.00%	0	0.00% <	0.003 <	0.0042	0.01

Water Supply Zone: Brighouse 2004 **Population 85114**

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Dichlobenil	0.1		µg/l	8	0	0.00%	0	0.00% <	0.001 <	0.0015 <	0.003
Dichlorprop	0.1		µg/l	8	0	0.00%	0	0.00% <	0.004 <	0.0044	0.005
Dieldrin	0.03		µg/l	8	0	0.00%	0	0.00% <	0.002 <	0.0026 <	0.003
Difenconazole	0.1		µg/l	8	0	0.00%	0	0.00% <	0.002 <	0.002 <	0.002
Diflufenican	0.1		µg/l	8	0	0.00%	0	0.00% <	0.002 <	0.0028 <	0.004
Diuron	0.1		µg/l	8	0	0.00%	0	0.00% <	0.002 <	0.0028 <	0.003
Epoxiconazole	0.1		µg/l	8	0	0.00%	0	0.00% <	0.001 <	0.0018 <	0.002
EPTC	0.1		µg/l	8	0	0.00%	0	0.00% <	0.003 <	0.005 <	0.006
Flufenacet	0.1		µg/l	8	0	0.00%	0	0.00% <	0.002 <	0.0028	0.006
Fluroxypyr	0.1		µg/l	8	0	0.00%	0	0.00% <	0.003 <	0.0034	0.006
Flurtamone	0.1		µg/l	8	0	0.00%	0	0.00% <	0.001 <	0.0018 <	0.002
Flusilazole	0.1		µg/l	8	0	0.00%	0	0.00% <	0.001 <	0.0018 <	0.002
Flutriafol	0.1		µg/l	8	0	0.00%	0	0.00% <	0.001 <	0.0018 <	0.002
Gamma-HCH (Lindane)	0.1		µg/l	8	0	0.00%	0	0.00% <	0.001 <	0.0015 <	0.003
Heptachlor	0.03		µg/l	8	0	0.00%	0	0.00% <	0.002 <	0.002 <	0.002
Heptachlor epoxide	0.03		µg/l	8	0	0.00%	0	0.00% <	0.002 <	0.0028 <	0.003
Imazapyr	0.1		µg/l	8	0	0.00%	0	0.00% <	0.002 <	0.0028	0.005
Ioxynil	0.1		µg/l	8	0	0.00%	0	0.00% <	0.003 <	0.0032	0.005
Isoproturon	0.1		µg/l	8	0	0.00%	0	0.00% <	0.002 <	0.002 <	0.002
Linuron	0.1		µg/l	8	0	0.00%	0	0.00% <	0.002 <	0.0032 <	0.007
MCPA	0.1		µg/l	8	0	0.00%	0	0.00% <	0.003 <	0.0038	0.006
Mecoprop-P	0.1		µg/l	8	0	0.00%	0	0.00% <	0.002 <	0.0028	0.005
Metaldehyde	0.1		µg/l	8	0	0.00%	0	0.00% <	0.003 <	0.006	0.021
Metazachlor	0.1		µg/l	8	0	0.00%	0	0.00% <	0.002 <	0.002 <	0.002
Monuron	0.1		µg/l	8	0	0.00%	0	0.00% <	0.002 <	0.002 <	0.002
op'-DDD (TDE)	0.1		µg/l	8	0	0.00%	0	0.00% <	0.002 <	0.0025 <	0.003
op'-DDE	0.1		µg/l	8	0	0.00%	0	0.00% <	0.002 <	0.0023 <	0.003
op'-DDT	0.1		µg/l	8	0	0.00%	0	0.00% <	0.002 <	0.0023 <	0.003
Oxadixyl	0.1		µg/l	8	0	0.00%	0	0.00% <	0.003 <	0.0034	0.005
Pendimethalin	0.1		µg/l	8	0	0.00%	0	0.00% <	0.002 <	0.003	0.006
Pesticides - Total Substances	0.5		µg/l	8	0	0.00%	0	0.00%	0	0.0174	0.103
pp'-DDD (TDE)	0.1		µg/l	8	0	0.00%	0	0.00% <	0.002 <	0.0024 <	0.003
pp'-DDE	0.1		µg/l	8	0	0.00%	0	0.00% <	0.001 <	0.0015 <	0.003
pp'-DDT	0.1		µg/l	8	0	0.00%	0	0.00% <	0.002 <	0.0025 <	0.003

Yorkshire Water Services **Reporting Period: 01-01-2018 to 31-12-2018**

Water Supply Zone: Brighouse 2004 **Population 85114**

ParameterName:	Std	Und Std	Units	No of Samples taken	No of Fails	% Fails	No of Fails (Und)	% Fails (Und)	Min	Mean	Max
Propachlor	0.1		µg/l	8	0	0.00%	0	0.00% <	0.001 <	0.0016	0.002
Propham	0.1		µg/l	8	0	0.00%	0	0.00% <	0.002 <	0.0026 <	0.003
Propiconazole	0.1		µg/l	8	0	0.00%	0	0.00% <	0.002 <	0.0021 <	0.003
Propyzamide	0.1		µg/l	8	0	0.00%	0	0.00% <	0.002 <	0.0026 <	0.005
Prosulfocarb	0.1		µg/l	8	0	0.00%	0	0.00% <	0.002 <	0.002	0.002
Quinmerac	0.1		µg/l	8	0	0.00%	0	0.00% <	0.001 <	0.0019 <	0.002
Simazine	0.1		µg/l	8	0	0.00%	0	0.00% <	0.001 <	0.0025 <	0.003
Tri-allate	0.1		µg/l	8	0	0.00%	0	0.00% <	0.002 <	0.0024 <	0.003
Trichlopyr	0.1		µg/l	8	0	0.00%	0	0.00% <	0.003 <	0.0055	0.009
Trietazine	0.1		µg/l	8	0	0.00%	0	0.00% <	0.001 <	0.0024 <	0.003

Notes:

1) Qualified values are taken at face value in all