

## Drinking Water Quality Report for Kings Cross Supply Zone ZTW0201

<b>Areas covered by Report:</b>	Kings Cross, London
<b>Report Period:</b>	01 January 2019 to 31 December 2019
<b>Upstream Zones:</b>	Thames Water Holloway WSZ (Z0373) Thames Water Kings Cross WSZ (Z0359)
<b>Population:</b>	2364
<b>Notices:</b>	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 Kings Cross 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 during the period of this report concerning "Appearance". The investigation by IWNL concluded that the water supplied was compliant with regulations.

<b>Hardness Rating:</b>	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
CaCO3 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	13	0	0	0.0	0
E.coli (faecal coliforms Confirmed)	No. 100/ml	13	0	0	0.0	0
Enterococci (Confirmed)	No. 100/ml	5	0	0	0.0	0
Sulphite-reducing Clostridia (Confirmed)	No. 100/ml	4	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 NH4	4	0.004	0.004	0.0040	0.5
Boron	mg/l B	4	0.04	0.04	0.036	1
Bromate	ug/l BrO3	4	0.1	0.3	0.18	10
Chloride	mg/l	4	39.1	41.1	40.10	250
Colour	mg/l Pt/Co	4	1	1	1.00	20
Cyanide (Total)	ug/l CN	5	0.7	1.7	1.00	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	4	610	647	630.3	2500	
Fluoride (Total)	mg/l F	4	0.12	0.13	0.123	1.5	
Free Residual Chlorine	mg/l	12	0.1	0.44	0.33	No Specific PCV	
Hydrogen ion	pH value	4	7.13	7.23	7.180	6.5-9.5	
Nitrate (Total)	mg/l NO3	3	35.9	36.5	36.13	50	
Nitrite - Consumer's Taps	mg/l NO3	3	0.002	0.002	0.0020	0.5	
Nitrite/Nitrate formula	No Units	3	0.72	0.73	0.723	1	
Sodium	mg/l Na	4	19.7	20.8	20.20	200	
Sulphate	mg/l SO4	4	27.7	30.1	29.23	250	
Total Residual Chlorine	mg/l	12	0.31	0.66	0.413	No Specific PVC	
Turbidity (CT)	FTU	4	0.1	0.22	0.145	4	

Hydrocarbons / Organics							
Parameter	units of measurement	Number of Samples	Minimum	Maximum	Average	Prescribed Concentration or Value	
1 1 1-Trichloroethane (Total)	ug/l	3	0.04	0.18	0.107	0.1	
1 2-Dichloroethane (Total)	ug/l	3	0.07	0.13	0.100	3	
Benzene (Total)	ug/l	3	0.02	0.07	0.040	1	
Benzo[a]Pyrene (Total)	ug/l	5	0.00022	0.00022	0.000220	0.01	
Benzo[b]Fluoranthene (Total)	ug/l	5	0.00052	0.00052	0.000520	The sum of PAHs must be <0.1 ug/l	
Benzo[ghi]Perylene (Total)	ug/l	5	0.0004	0.0004	0.000400	The sum of PAHs must be <0.1 ug/l	
Benzo[k]Fluoranthene (Total)	ug/l	5	0.00047	0.00047	0.000470	The sum of PAHs must be <0.1 ug/l	
Bromodichloromethane (Total)	ug/l	3	0.65	1.29	0.933	60	
ChloroDibromomethane (Total)	ug/l	3	1.9	2.79	2.383	100	
Indeno[1 2 3-cd]Pyrene (Total)	ug/l	5	0.00048	0.00048	0.000480	The sum of PAHs must be <0.1 ug/l	
Polycyclic Aromatic Hydrocarbons (Total by Calculation)	ug/l	5	0.003	0.02	0.012	0.1	
Tetrachloroethene (Total)	ug/l	3	0.72	1	0.883	10	
Tetrachloromethane (Total)	ug/l	3	0.02	0.14	0.067	3	
Total Organic Carbon	mg/l C	4	0.7	1	0.80	NO ABNORMAL CHANGE	
Total Trichloroethene & Tetrachloroethene (Total by Calculation)	ug/l	3	0.72	1	0.9	100	

<b>Hydrocarbons / Organics continued</b>						
Parameter	units of measurement	Number of Samples	Minimum	Maximum	Average	Prescribed Concentration or Value
Tribromomethane-Bromoform (Total)	ug/l	3	1.96	3.2	2.527	100
Trichloroethene (Total)	ug/l	3	0.05	0.34	0.163	10
Trichloromethane-Chloroform (Total)	ug/l	3	0.35	0.73	0.490	300
Trihalomethanes (Total by Calculation)	ug/l	3	4.9	8.01	6.333	100

<b>Metals</b>						
Parameter	units of measurement	Number of Samples	Minimum	Maximum	Average	Prescribed Concentration or Value
Aluminium (Total)	ug/l Al	4	3.21	7.22	6.218	200
Antimony	ug/l Sb	4	0.07	0.09	0.078	5
Arsenic (Total)	ug/l As	4	0.19	0.24	0.218	10
Cadmium (Total)	ug/l Cd	4	0.003	0.013	0.0080	5
Chromium (Total)	ug/l Cr	4	0.22	0.52	0.360	50
Copper (Total)	mg/l Cu	4	0.0102	0.109	0.04218	2
Iron (Total)	ug/l Fe	4	0.7	0.7	0.700	200
Lead (10)	ug/l Pb	4	0.12	0.26	0.190	10
Manganese (Total)	ug/l Mn	4	0.22	0.22	0.220	50
Mercury (Total)	ug/l Hg	4	0.03	0.03	0.030	1
Nickel (Total)	ug/l Ni	4	1.14	1.87	1.393	20
Selenium (Total)	ug/l Se	4	0.81	1.02	0.9	10

<b>Organoleptic Parameters</b>						
Parameter	units of measurement	Number of Samples	Minimum	Maximum	Average	Prescribed Concentration or Value
Odour (Quantitative)	Dilution Number	4	0	0	0.0	0
Taste(Quantitative)	Dilution Number	4	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**

<b>Term</b>	<b>Definition</b>
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

---