

Public Record - Water Quality Summary

01/01/2023 to 31/12/2023

Farlington Central Supply Zone

Parameter (Units)	Ann. Sar Freque		Comment	PCV		nples ening PCV		entration of all sample	
	Required	Taken			No.	%	Min	Mean	Мах
Colony Count 72h at 22C(No/ml)	76	78		N/A	0	0.00	0	0.4	4
Colony Count 48h at 37C(No/ml)	0	78		N/A	0	0.00	0	1.2	39
Coliform Bacteria (Indicator)(No/100ml)	228	230		0	1	0.43	0	0	1
E-Coli (Faecal Coliforms - Confirmed)(No/100ml)	228	230		0	0	0.00	0	0	0
Clostridium Perfringens (Confirmed)(No/100ml)	8	8		0	0	0.00	0	0	0
Enterococci (Confirmed)(No/100ml)	8	8		0	0	0.00	0	0	0
Residual Disinfectant - Total(mg/l)	228	232		N/A	0	0.00	0.17	0.43	0.8
Residual Disinfectant - Free(mg/l)	228	232		N/A	0	0.00	0.11	0.37	0.55
Nitrate(mg/I NO3)	8	8		50	0	0.00	32.1	34	35.9
Ammonium (Total)(mg/l NH4)	76	76		0.5	0	0.00	<0.073	<0.073	<0.073
Bromate(ug/I BrO3)	8	8		10	0	0.00	<0.8	<0.8	<0.8
Chloride(mg/l Cl)	8	8		250	0	0.00	20.9	22.3	23.4
Colour(mg/l Pt/Co)	76	77		20	0	0.00	<1.23	<1.44	<2
Cyanide-Total(ug/I CN)	8	8		50	0	0.00	<4.1	<4.1	<4.1
Conductivity(uS/cm @20C)	76	77		2500	0	0.00	505	549.7	591
Fluoride (Total)(mg/l F)	8	8		1.5	0	0.00	0.059	0.089	0.109
Hydrogen Ion (pH) - Indicator(pH Value)	76	77		6.5 - 9.5	0	0.00	7.07	7.21	7.46
Nitrite (Consumers Taps)(mg/l NO2)	8	8		0.5	0	0.00	<0.011	<0.011	<0.011
Nitrate/Nitrite Formula(mg/I)	8	8		1	0	0.00	0.642	0.68	0.718
Sulphate(mg/I SO4)	8	8		250	0	0.00	14.4	18.9	25.7
Odour (Quantitative)(Dil Num)	76	76		0	0	0.00	0	0	0
Taste (Quantitative)(Dil Num)	76	76		0	0	0.00	0	0	0
Turbidity(NTU)	76	79		4	0	0.00	0.051	0.149	2.54
Total Organic Carbon(mg/l C)	8	8		N/A	0	0.00	0.4	0.6	1
Aluminium (Total)(ug/I Al)	76	76		200	1	1.32	<8.1	20.6	382.8
Antimony(ug/I Sb)	8	8		5	0	0.00	<0.2	0.2	0.2
Arsenic (Total)(ug/I As)	8	8		10	0	0.00	<1	<1	<1
Boron (Total)(mg/l B)	8	8		1	0	0.00	<0.14	<0.14	<0.14
Cadmium (Total)(ug/l Cd)	8	9		5	0	0.00	<0.22	<0.22	<0.22



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Chromium (Total)(ug/l Cr)	8	9		50	0	0.00	<2.3	<2.3	<2.3
Copper (Total)(mg/l Cu)	8	9		2	0	0.00	<0.172	<0.172	<0.172
Iron (Total)(ug/l Fe)	76	76		200	0	0.00	<13.8	15.1	73.3
Lead (10 ug/l)(ug/l Pb)	8	8		10	0	0.00	<0.5	1.2	3.6
Manganese (Total)(ug/I Mn)	76	76		50	0	0.00	<2.5	<2.5	<2.5
Mercury(ug/I Hg)	8	8		1	0	0.00	<0.04	<0.04	<0.04
Nickel(ug/l Ni)	8	9		20	0	0.00	<1.3	1.3	1.3
Selenium(ug/l Se)	8	8		10	0	0.00	<0.8	<0.8	<0.8
Sodium (Total)(mg/l Na)	8	8		200	0	0.00	<9.1	10.2	11.7
Benzo[a]Pyrene(ug/l)	8	8		0.01	0	0.00	<0.003	<0.003	<0.003
Polycyclic Aromatic Hydrocarbons (4)(ug/l)	8	8		0.1	0	0.00	0	0	0
1,2 Dichloroethane(ug/I)	8	11		3	0	0.00	<0.12	<0.12	<0.12
Tetrachloromethane(ug/l)	8	11		3	0	0.00	<0.11	<0.11	<0.11
Tetra+Trich(ug/I)	8	11		10	0	0.00	0	0	0.2
Trihalomethanes(ug/l)	8	8		100	0	0.00	7.53	13.97	31.46
2,4 - D(ug/l)	8	8		0.1	0	0.00	<0.007	<0.007	<0.007
Atrazine(ug/l)	8	8		0.1	0	0.00	0.005	0.006	0.007
Bentazone(ug/l)	8	8		0.1	0	0.00	<0.007	<0.007	<0.007
Benzene(ug/I)	8	11		1	0	0.00	<0.02	<0.02	<0.02
Dieldrin(ug/I)	8	8		0.03	0	0.00	<0.007	<0.007	<0.007
Diuron(ug/l)	8	8		0.1	0	0.00	<0.004	<0.004	<0.004
Fluroxypyr(ug/l)	8	8		0.1	0	0.00	<0.008	<0.008	<0.008
Glyphosate(ug/l)	8	8		0.1	0	0.00	<0.005	<0.005	<0.005
Metazachlor(ug/l)	8	8		0.1	0	0.00	<0.003	<0.003	<0.003
Pendimethalin(ug/l)	8	8		0.1	0	0.00	<0.007	<0.007	<0.007
MCPA(ug/l)	8	8		0.1	0	0.00	<0.008	<0.008	<0.008
Mecoprop (MCPP)(ug/l)	8	8		0.1	0	0.00	<0.005	<0.005	<0.005
Metaldehyde(ug/l)	8	8		0.1	0	0.00	<0.008	<0.008	<0.008
Propazyamide(ug/l)	8	8		0.1	0	0.00	<0.005	<0.005	<0.005

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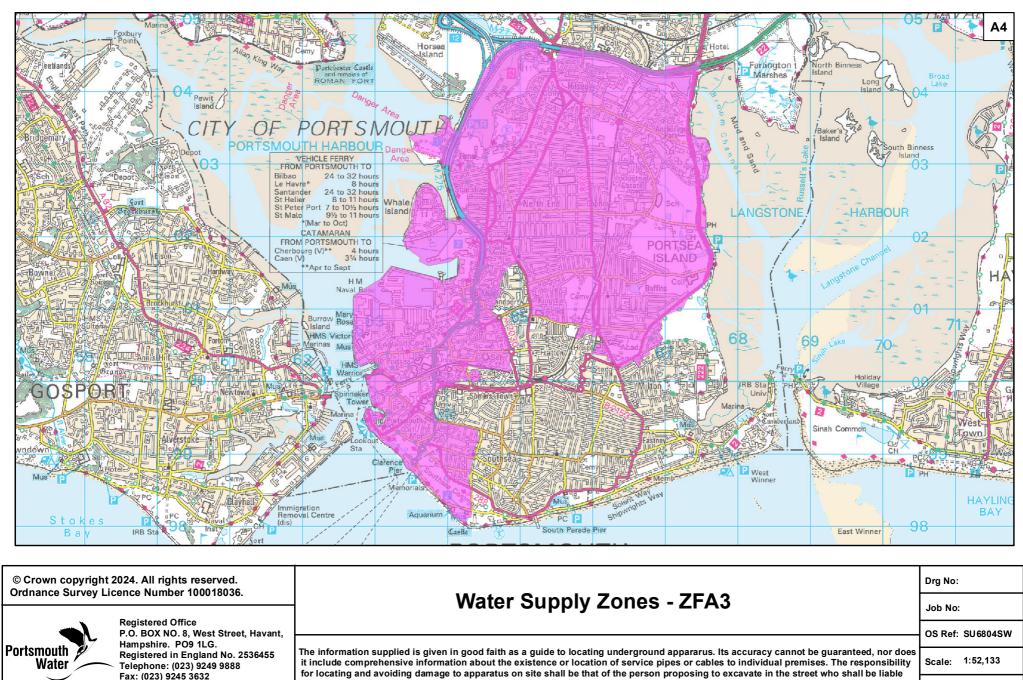


01/01/2023 to 31/12/2023

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Parameter (U	Jnits)	Ann. Sar Freque		Comment	PCV	Samp Contraver			ntration of all sample	
		Required	Taken			No.	%	Min	Mean	Max
Simazine(ug/l	1)	8	8		0.1	0	0.00	0.004	0.005	0.005
Triclopyr(ug/l))	8	8		0.1	0	0.00	<0.015	<0.015	<0.015
Total Pesticid	es(ug/l)	8	9		0.5	0	0.00	0	0.01	0.012
61	Total No.Tests	2223	3	Failures =	2 =	0.090 %	Pa	ss Rate	= 99.9	91 %

Farlington Central Zone Population 2023 = 94,454



Fax: (023) 9245 3632 Website: www.portsmouthwater.co.uk

Date: 27/02/2024

PORTSMOUTH WATER LTD

General Information	ZONE – FARLINGTON CENTRAL	2023
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Comments on Water Quality:

Aluminium

A random tap sample taken from a property in Portsmouth within the Farlington Central Water Quality Zone (ZFA3) exceeded the regulatory level for aluminium (200µg/l) with a result 382.8µg/l. Resamples taken from the original sample location and from neighbouring locations gave satisfactory results for aluminium. Findings of the investigations undertaken have identified that the root cause of the aluminium exceedance is unknown. All other aluminium samples collected from the zone in 2023 have been satisfactory.

Coliforms

A random tap sample taken from a property in Portsmouth within the Farlington Central Water Quality Zone (ZFA3) exceeded the regulatory level for Coliforms (0cfu per 100ml) with a confirmed count of 1cfu/100ml. Resamples taken from the original location gave satisfactory results once the tap had been cleaned. Samples taken from neighbouring properties gave satisfactory results with no detection of any Coliforms. The water fittings inspection confirmed the root cause of the exceedance is likely to be attributable to the kitchen tap and surrounding environment. All other Coliform samples collected from the zone in 2023 have been satisfactory.

In all other respects this water meets the chemical and microbiological requirements of the Water Supply (Water Quality) Regulations 2016 (as amended).

Action taken to comply with Section 19 undertakings

Phosphate is dosed in the water to reduce pick-up of lead from lead pipework.



Determinands Analysed

METALS		
SUBSTANCE TESTED	WHAT IT MEANS	REGULATORY STANDARD
Antimony		5.0 μg /l
Cadmium		5.0 μg/l
Chromium	These metals can occur naturally in source water at low levels. Some may also come from plumbing systems and	50 μg /l
Nickel	industrial processes. The standards provide wide safety	20 µg/l
Mercury	margins on known levels of toxicity.	1.0 µg /l
Selenium		10 µg /l
Aluminium	Aluminium occurs naturally and is also used during treatment to remove impurities. Concerns have been expressed about a link between aluminium and Alzheimer's disease, but there is no proven connection, although research on this is ongoing.	200 μg/l
Arsenic	This occurs naturally in water at low levels.	10 µg /l
Boron	Low levels of boron can be found in some waters due to its use in detergents.	1.0 mg/l
Copper	Traces of copper can sometimes be found in water, usually as a result of old, corroding plumbing or new plastic pipes. This can cause a metallic taste.	2.0 mg/l
Lead	Lead is rarely present in water sources but many properties built before the mid-1960's have a lead supply pipe or some lead plumbing. Portsmouth Water adds phosphate to most of the water supplied to reduce the amount of lead dissolved from pipes.	10 µg /l
Iron	Iron can naturally occur in some water sources and is removed during treatment. Iron in the water supplies may also be derived from old iron mains or domestic pipe work. This is not a health hazard, but can cause the water to become discoloured.	200 µg/l
Manganese	This can naturally occur in some water sources and is removed during treatment. Disruption to water mains can stir up sediment, containing manganese.	50 µg/l
Sodium	Sodium is a naturally occurring substance that can increase as an effect of softening the water. If you use a water softener you should retain an un-softened supply for drinking.	200 mg/l



NON-METALS		
SUBSTANCE TESTED	WHAT IT MEANS	REGULATORY STANDARD
Ammonium	Ammonia occurs naturally in many water sources. It is not harmful and is normally removed by treatment.	0.5 mg/l
Bromate	Bromate can potentially form when hypochlorite or ozone are used in water treatment. We control the treatment process tightly to minimize this.	10 µg/l
Chloride	Chloride occurs naturally in water but may give a salty taste to the water and contribute to corrosion.	250 mg/l
Cyanide	Cyanide is rarely found in water. When it is detected it is normally in areas of heavy industry.	50 μg/l
Fluoride	Fluoride occurs naturally at low levels in some of Portsmouth Water's supplies. None of our supplies are artificially fluoridated.	1.5 mg/l
Nitrate	Nitrate arises from the use of fertilizer on agricultural land.	50 mg/l
Nitrite	Nitrite occurs at much lower levels than nitrate and conversion from one form to another occurs readily. The regulations also require that the Nitrate:Nitrite ratio [nitrate]/50 + [nitrite]/3 is \leq 1.0.	0.5 mg/l at Customers tap 0.1 mg/l at Water Treatment Works
Sulphate	Sulphate occurs naturally in water and comes from mineral deposits.	250 mg/l

BACTERIA		
SUBSTANCE TESTED	WHAT IT MEANS	REGULATORY STANDARD
Faecal Coliforms (E.coli)	These bacteria are specific inhabitants of the digestive systems of warm blooded animals. They are an indication of possible contamination (with other harmful bacteria possibly being present). Any detection in treated waters is investigated as a matter of urgency.	0 per 100ml
Total Coliforms	These are bacteria that provide a general and very sensitive measure of microbiological quality. They are removed by water treatment processes, but where they are detected it is often because they can grow within taps in the home. Any detection in treated waters is investigated as a matter of urgency.	0 per 100ml
Enterococci	As with coliforms, the presence of these organisms can indicate possible contamination in the water supply so they are investigated as a matter of urgency.	0 per 100ml
Colony Count at 37°C	Small numbers of bacteria can be present in treated water. The information obtained from these tests is used to maintain the efficiency of the water treatment processes and the	Number per 1ml
Colony Count at 22°C	the efficiency of the water treatment processes and the cleanliness of water mains. Any unusually high levels are investigated.	No abnormal change from a long term average.
Clostridium Perfringens	As with coliforms, the presence of these organisms can indicate contamination in the water supply so they are investigated as a matter of urgency.	0 per 100ml



ORGANIC CHEMICALS: PESTICIDES				
SUBSTANCE TESTED	WHAT IT MEANS	REGULATORY STANDARD		
Aldrin		0.03 µg/l		
Dieldrin	Pesticides consist of chemicals used by farmers, local authorities and gardeners. The traces of these found in untracted water are tunically for loss than the maximum	0.03 µg/l		
Heptachlor	untreated water are typically far less than the maximum advised to protect public health. The pesticides tested for will vary from area to area, depending on the usage of pesticides in the surrounding area	0.03 µg/l		
Heptachlor epoxide		0.03 µg/l		
Other individual Pesticides	of each water source.	0.1 μg/l		
Total Pesticides	This is the total amount of each individual pesticide detected in the water sample tested.	0.5 μg/l		

ORGANIC CHEMICALS: OTHERS					
SUBSTANCE TESTED	WHAT THANK ANS				
Benzene	Benzene is rarely found naturally in water but is removed in treatment processes. It arises from petroleum products and industries.	1.0 μg/l			
Trichloromethane		100 //			
Dichlorobromomethane A	These compounds are known as Trihalomethanes (THM's).	100 ug/l (*For the total amount			
Dibromochloromethane *	They are formed when chlorine comes into contact with organic compounds in the raw untreated water.	of these four compounds)			
Tribromomethane		compounds)			
Tetrachloromethane		3.0 µg/l			
1,2 Dichloroethane	These substances are known as solvents. They arise from industrial processes and are removed from the water during	3.0 µg/l			
Trichloroethene × and Tetrachloroethene ×	the treatment stage.	10 μg/l (× For the total amount of these two compounds)			
Benzo-a-pyrene		0.01 µg/l			
Benzo-b-fluoranthene *	These compounds are known as Polycyclic aromatic				
Benzo-k-fluoranthene *	hydrocarbons (PAH's). They are rare substances and are seldom found in water. Where they do occur, the cause is	0.1 μg/l (*For the total emount of			
Benzo-ghi-perylene *	usually the coal tar pitch lining from iron mains.	(*For the total amount of these four compounds)			
Indeno-123-cd-pyrene *					



OTHER PARAMETERS				
SUBSTANCE TESTED	WHATTI WHANS			
Colour	Chemical changes in the water source or pressure changes in the distribution main can give the water a tinge of colour.	20 mg/l Pt/Co		
Conductivity	This is a measure of the level of natural mineral salts contained in the water. This is measured by passing an electrical current through the water.	2500 μS per cm at 20°C		
pH (Hydrogen Ion)	This is a measure of the acidity or alkalinity of the water. A pH of 7 is neutral.	Between 6.5 and 9.5 pH units		
Taste Dilution Number	This is to check if the water has any unpleasant taste or smell. It is measured using trained panellists to taste and smell the	Acceptable to consumers		
Odour Dilution Number	water in strictly controlled conditions.	and no abnormal change		
Temperature	Temperature is checked to monitor changes in the water system.	No legal limit		
Total Chlorine	Sufficient chlorine is added to all our supplies to ensure the absence of harmful bacteria. Portsmouth Water also aims to	No legal limit		
Free Chlorine	keep the levels at customer's taps low to minimize associated taste and odour issues.			
Total Organic Carbon	TOC is a measure of the organic material present in the water. It varies naturally depending on the source of the water and is monitored for any unusual changes (which could be caused by oil spills or other pollutants).	No abnormal change		
Turbidity	This is a measure of suspended material in the water.	4.0 NTU at Customers tap 1.0 NTU at Water Treatment Works		