

2018

# Water Quality Report

The Jersey New Waterworks Company Limited



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# Executive Summary

The water supplied by Jersey Water during 2018 was again of a very high quality. The Company achieved an overall compliance rate of 99.99% which was an improvement over the previous year's rate of 99.98%. There were no instances of pesticides or nitrates exceeding regulatory limits in the treated water during the year and the bacteriological compliance of water leaving the treatment works was 99.99% (2017: 100%). Throughout 2018, the Company undertook approximately 15,000 regulatory treated water analyses. Of these, just one was outside of the respective regulatory parameter but posed no risk to health.

For the 5th consecutive year, nitrate concentrations in treated water were fully compliant with the regulatory requirements and the maximum concentration of nitrates detected in treated water was 45.7mg/l; below the regulatory limit of 50mg/l but higher than the 2017 maximum of 36mg/l. The increase on the previous year is almost certainly attributable to the much greater rainfall in 2018 which will have increased the amount of runoff from land and made widespread use of mechanised fertiliser application and potato planting much more difficult.

Jersey Water took over 46,000 analyses from raw water sources looking for over 127 different pesticides. The results of the tests for pesticides showed that on 264 occasions raw water contained concentrations of pesticides that exceeded the limit for drinking water quality. This compares with 249 occasions where such exceedances occurred in 2017. The modest increase was again principally due to the wet weather which caused an increase in the presence of the pesticide oxadixyl. There was a reduction of 9% in the instances of pesticides in current use exceeding the limit for drinking water quality.

While fewer of our consumers contacted Jersey Water either with enquiries or about water quality issues compared to the England and Wales (E&W) industry averages, there was a slight rise in the total number of consumer's contacts regarding the acceptability of water to from 91 in 2017 to 100 in 2018.

# Supply Points and Supply Zone Regulatory Results

**Jersey Water adopts a risk-based water quality monitoring programme consistent with other water suppliers in the UK, Europe and elsewhere. This approach is consistent with the Company's Water Safety Plan. Potential risks are evaluated and water quality testing is focused on those areas of risk such as raw water pesticides. During 2018 a revalidation of our risk assessment was undertaken with all parameters being measured at the standard sampling frequency to ensure the risk profile had not changed.**

For compliance purposes, Jersey Water examined samples from our two treatment works at Handois and Augres (supply points), the service reservoirs at Westmount and Les Platons and the supply zone taken from randomly selected customer's premises. The samples from our customers are taken at regular intervals throughout the year.

Jersey Water is required to undertake two kinds of regulatory water quality monitoring - check and audit monitoring.

Check monitoring is more frequent and is designed to ensure the treatment works are operating as expected and that the water in distribution is suitable for supply. Audit monitoring is performed less frequently and is designed to test the quality of the water supplied against the full requirements of the Water (Jersey) Law 1972.

## Overall compliance

In 2018 Jersey Water's water quality was extremely high with only one non-compliant regulatory analysis identified out of 14,873 analyses taken for compliance purposes. Overall water quality compliance for 2018 was 99.99%, showing a slight improvement over 2017 when the compliance rate achieved was 99.98%.

Percentage compliance





### Treatment works performance (supply points)

Jersey Water takes regular samples of drinking water leaving the water treatment works to ensure that it complies with regulatory requirements before it enters the mains network. During 2018 the company took 496 samples throughout the year and tested them against 151 physical, bacteriological and chemical parameters. Out of a total of 12,065 analyses only one did not meet the required standards. The sample that did not meet the required standard was for a coliform which was detected in a sample taken from the final water at Handois Treatment Works. Repeat samples were negative. Investigations showed all the disinfection processes and turbidity had been satisfactory throughout.

Detailed supply point results are set out in the Appendices.

### Service reservoir performance

To comply with regulations, weekly microbiological and residual disinfection samples are taken from the service reservoirs to ensure there has been no deterioration in the water quality during storage. During 2018, 624 analyses were undertaken on 156 samples all of which complied with the regulations.

Detailed service reservoir results are set out in the Appendices.

### Water quality in the distribution system (supply zone)

During 2018, 2,185 analyses from 240 water samples taken from randomly selected customer properties across all areas of the distribution system were compliant with regulatory limits.

Detailed supply zone results are set out in the Appendices.

Parameter	Date	Analysis type	Concentration recorded	Regulatory limit
Coliform	23/04/18	Check analysis	1 CFU per 100ml	0 CFU per 100ml

# Consumer Contacts and Enquiries

During 2018 all customer contacts and enquiries received by Jersey Water were recorded and categorised, whether or not they required a visit to address the concerns raised. These are summarised below:

## Informing consumers

	Total	Consumer enquiries - sub categories (section 4.2)				
		Fluoride	Water hardness	Water quality report	Other information	
Total consumer enquiries (definition 3.1.1)	10	3	0	0	7	
		Consumer contact (drinking water quality concern) - sub categories (section 4.6)				
		Pets & other animals	Lead & other analysis	Incident related	Campaigns	Lifestyle
Total contacts drinking water quality concern (definition 3.1.5)	8	0	7	0	0	1
<b>Zone total</b>	<b>18</b>					
<b>Zone rate (contact per 1,000 population)</b>	<b>0.20</b>					

E&W Industry average 2017: 0.50

## Acceptability of water to consumers

	Total	Consumer contact (appearance) - sub categories (section 4.3)						
		Discoloured - black/brown/orange	Discoloured - blue/green	Particles	White - air	White - chalk	Animalcules	General condition
Total contacts appearance (definition 3.1.2)	61	32	0	2	16	2	0	9
		Consumer contact (taste and odour) - sub categories (section 4.4)						
		Chlorine	Earthy/musty	Petrol/diesel	Other taste or odour			
Total contacts taste and odour (definition 3.1.3)	33	8	3	0	22			
		Consumer contact (illness) - sub categories (section 4.5)						
		Gastroenteritis	Oral	Skin	Medical opinion			
Total contacts illness (3.1.4)	6	2	0	2	2			
<b>Zone total</b>	<b>100</b>							
<b>Zone rate (contact per 1,000 population)</b>	<b>1.11</b>							

E&W Industry average 2017: 1.31



During 2018 fewer of our customers contacted Jersey Water regarding general enquiries or about water quality issues compared to the industry averages in England and Wales for the same period. There was a slight rise in the total number of contacts regarding the acceptability of water made by our customers during 2018 with 100 such contacts being made compared to 91 the previous year. This represents a zone rate (number of contacts per 1,000 consumers) of 1.11 which is over 26% less than the latest industry averages in England and Wales.

As in previous years discoloured water caused by rust was the most common issue consumers contacted the Company about. 32% of all contacts were in the sub category 'Discoloured – black/brown/orange'. Despite this, this represented a 24% decrease in such contacts compared with the previous year (42 contacts during 2017).

Jersey Water had 18 customer contacts requesting water quality information in 2018 which was a slight decrease in such requests over the previous year. These contacts covered a range of topics ranging from dishwasher settings related to water hardness to fluoride dosing. Jersey Water does not add fluoride to the water but there is a small amount naturally occurring in our streams and reservoirs, typically 0.1mg/l.

During 2018 Jersey Water responded to customer concerns about drinking water quality by taking 119 bacteriological samples at customer's premises. Of these all were found to be compliant with the regulations with the exception of 2 where contamination was found to have been caused by contaminated taps.

# Raw Water Quality

**For operational and monitoring purposes Jersey Water takes samples of water from streams, reservoirs and at the inlet to the treatment works (raw water presented for treatment). The information obtained enables our operational staff to select the most suitable waters to be taken for treatment.**

The 2017/2018 winter proved to be much wetter than the previous period with over 400mm of rain falling in the period from December 2017 to February 2018 which compares to less than 200mm in the same period the year before (2016/17). The increased amount of rainfall raised the groundwater levels which then contributed more water to the overall base stream flows. As nitrate and oxadixyl are found in the base flow in some streams this accounted for the raised concentrations of both parameters in samples taken during 2018.

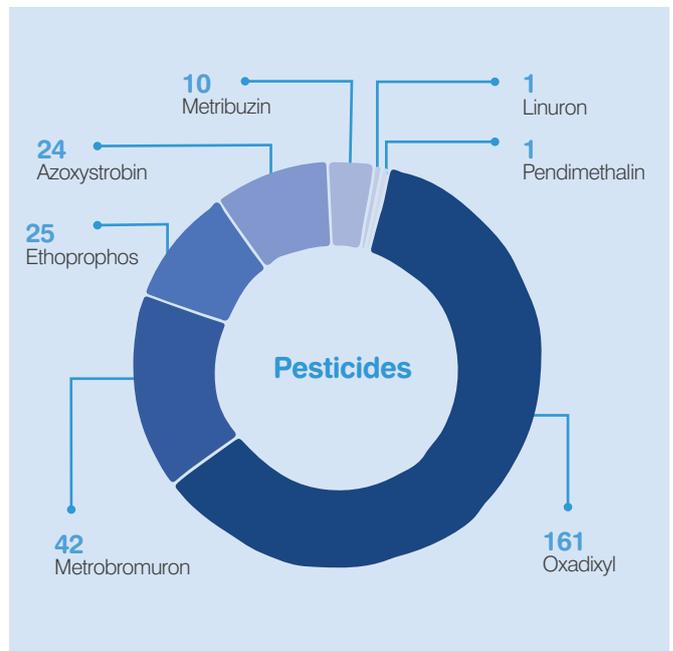
## Nitrates

Nitrates in treated water reached a peak of 45.7mg/l during February 2018 which are below the regulatory limit of 50mg/l. This outcome was achieved by Jersey Water's staff making careful selection and blending of raw water sources during periods of high agricultural activity such as during the potato growing season and the availability of low nitrate water collected in the reservoirs before the growing season began. Concentrations of nitrates in raw water peaked at 144.9mg/l in January 2018 in the Queens Valley Side Stream catchment and averaged 50.4 mg/l throughout the Island during the year up from 46.9 mg/l in 2017. The most likely explanation of this situation is again down to the wetter weather experienced during 2018.

## Pesticides

During 2018 there were no breaches of the regulatory pesticide limit (for either individual pesticides or Total pesticides) in drinking water.

In 2018, over 46,000 analyses were undertaken for 127 different pesticides in the stream courses and reservoir outlets. Of these, 264 analyses were found to be above the 0.1 µg/l operational limit set by Jersey Water. For comparison during 2017, 249 such analyses were found to be above the operational limit. The increase experienced during 2018 was due to extra breaches for the historic pesticide oxadixyl. For products in current use during 2018 there were 9% fewer breaches of the operational limits when compared to 2017.



# Understanding Test Results

This summary may help you better understand the 2018 test results on the following pages.

## Regulatory Analyses

The Water (Jersey) Law 1972 as amended requires two types of monitoring at the treatment works and service reservoir outlets and in the distribution system.

- **Check monitoring**  
Tests performed on a frequent basis to ensure that the treatment works and the water in distribution is suitable for supply.
- **Audit monitoring**  
Testing performed less frequently than check monitoring and which is designed to test the quality of the water supplied against the full requirements of the Water (Jersey) Law 1972.

## Key Terms

Term	Description
<b>Substances and parameters</b>	The item we are testing for.
<b>Specific concentration or value (maximum) or state</b>	The maximum or range of values allowed by law in the water supply (regulatory limit).
<b>mg/l</b>	milligrams per litre or parts per million, equivalent to 1p in £10,000.
<b>µg/l</b>	micrograms per litre or parts per billion, equivalent to 1p in £10,000,000.
<b>µS/cm</b>	The unit of measure commonly used for electrical conductivity in water, microSiemens/cm.
<b>Sample Point</b>	The location where the sample was taken.
<b>Min</b>	The minimum or lowest result produced for that test.
<b>Mean</b>	The average value of all the results produced for that test.
<b>Max</b>	The maximum or highest result produced for that test.
<b>% Compliance</b>	The percentage of the results that comply with the regulatory limit.
<b>What it means</b>	A description of what it is we are looking for and what it possibly indicates.

# Appendix 1: 2018 Treatment Works Performance – Check Monitoring

Substances and parameters	Specific concentration or value (maximum) or state	Sample Point	Min	Mean	Max	% compliance	What it means
<i>E.coli</i>	0 per 100ml	Augres Tank	0	0	0	100	Bacteria which are indicative of faecal pollution.
		Handois PS	0	0	0	100	
Coliform bacteria	0 per 100ml	Augres Tank	0	0	0	100	These bacteria are widely distributed in the environment and provide a sensitive measure of microbiological quality. They are removed during the treatment process.
		Handois PS	0	0	1	99.5	
Colony counts	No abnormal change	Augres Tank	No abnormal change			100	A range of harmless bacteria that may be present in water supplies. These are monitored to ensure the efficiency of the treatment process and cleanliness.
		Handois PS				100	
Nitrite	0.1 mg NO <sub>2</sub> /l	Augres Tank	0.000	0.004	0.012	100	Nitrite may be associated with nitrate or with the use of ammonia in water disinfection.
		Handois PS	0.000	0.005	0.010	100	
Residual disinfectant	No value mg Cl <sub>2</sub> /l	Augres Tank	0.33	0.51	0.63		Sufficient chlorine is added to all supplies to ensure the absence of harmful microorganisms.
		Handois PS	0.37	0.58	0.84		
Turbidity	1 NTU	Augres Tank	0.04	0.08	0.13	100	The Standard requires that there should be no haziness caused by fine particles.
		Handois PS	0.06	0.08	0.19	100	
Conductivity	2500 µS/cm at 20°C	Augres Tank	424	506	560	100	A measure of the ability of the water to conduct an electric current and therefore a measurement of the mineral salts dissolved in the water.
		Handois PS	489	540	588	100	

# Appendix 2: 2018 Treatment Works Performance - Audit Monitoring

Substances and parameters	Specific concentration or value (maximum) or state	Sample Point	Min	Mean	Max	% compliance	What it means
<i>Clostridium Perfringens</i>	0 per 100 ml	Augres Tank	0	0	0	100	Bacteria which are indicative of faecal pollution.
		Handois PS	0	0	0	100	
Mercury	1.0 µg Hg/l	Augres Tank	<0.02	<0.02	<0.02	100	Low levels of this substance may occur naturally in water after it has passed through various mineral deposits and rock strata. The standards are health-related and have a large safety factor built in. Mercury is rarely found in drinking water.
		Handois PS	<0.02	<0.02	<0.02	100	
Benzene Bromate 1,2 dichloroethane Trichloroethene & Tetrachloroethene	1.0 µg/l 10 µg BrO <sub>3</sub> /l 3.0 µg/l 10 µg/l	Augres Tank	All results were below limit of detection from all the sample points.			100	Benzene may be introduced into source water by industrial effluents or atmospheric pollution. Bromate can be associated with industrial pollution or can occur as a by-product of the disinfection process. The other compounds are all organic solvents, their presence is an indication of industrial pollution.
		Handois PS				100	
Tetrachloromethane	3 µg/l	Augres Tank	<0.04	<0.04	0.09	100	This substance is an organic solvent, its presence is an indication of industrial pollution.
		Handois PS	<0.04	<0.04	0.11	100	
Boron	1.0 mg B/l	Augres Tank	0.055	0.096	0.171	100	Very low levels of these substances may occur naturally, but higher amounts could be associated with industrial pollution. The standards are health related but have a large built-in safety factor.
		Handois PS	0.094	0.113	0.139	100	
Cyanide	50 µg CN/l	Augres Tank	<2.0	<2.0	<2.0	100	
		Handois PS	<2.0	<2.0	<2.0	100	

Substances and parameters	Specific concentration or value (maximum) or state	Sample Point	Min	Mean	Max	% compliance	What it means
Fluoride	1.5 mg F/l	Augres Tank	0.030	0.056	0.086	100	Occurs naturally in many water sources. The standard is set to ensure no adverse effects. Jersey Water does not artificially fluoridate the water supply.
		Handois PS	0.030	0.060	0.140	100	
Chloride	250 mg Cl/l	Augres Tank	47	54	58	100	Occurs naturally in most water sources. Levels above the standard could give rise to taste issues and contribute to corrosion.
		Handois PS	56	64	66	100	
Sulfate	250 mg SO <sub>4</sub> /l	Augres Tank	73	82	98	100	Dissolves in water after contact with certain mineral deposits. Excess levels can contribute to corrosion.
		Handois PS	78	89	102	100	
Total Organic Carbon	No abnormal change	Augres Tank	1.4	1.7	2.0	100	This parameter assesses the organic content of the water.
		Handois PS	1.4	1.9	2.3	100	
Gross Alpha	0.1 Bq/l	Augres Tank	<0.020	<0.020	0.030	100	These parameters are measured as part of screening for radioactivity.
		Handois PS	<0.020	<0.020	0.030	100	
Gross Beta	1.0 Bq/l	Augres Tank	<0.20	<0.20	<0.20	100	
		Handois PS	<0.20	<0.20	<0.20	100	

# Appendix 3 - 2018 Treatment Works Pesticide Analysis – Audit Monitoring

A suite of 127 pesticides have been analysed during 2018 at the treatment works outlets, the following table shows the ones that were detected above 0.004 µg/l – there were 117 substances that were not.

Substances and parameters	Specific concentration or value (maximum) or state	Sample Point	Min	Mean	Max	% compliance
Atrazine Desisopropyl	0.1 µg/l	Augres Tank	<0.005	<0.005	0.007	100
		Handois PS	<0.005	<0.005	0.013	100
Azoxystrobin	0.1 µg/l	Augres Tank	<0.005	<0.005	0.006	100
		Handois PS	<0.005	<0.005	0.021	100
Chlorpyrifos Methyl	0.1 µg/l	Augres Tank	<0.005	<0.005	0.015	100
		Handois PS	<0.005	<0.005	0.016	100
Clopyralid	0.1 µg/l	Augres Tank	<0.005	0.005	0.013	100
		Handois PS	<0.005	0.007	0.055	100
Diuron	0.1 µg/l	Augres Tank	<0.005	<0.005	0.006	100
		Handois PS	<0.005	<0.005	0.005	100
Ethoprophos	0.1 µg/l	Augres Tank	<0.005	<0.005	0.019	100
		Handois PS	<0.005	0.007	0.049	100
Metribuzin	0.1 µg/l	Augres Tank	<0.005	0.007	0.031	100
		Handois PS	<0.005	<0.005	0.023	100
Oxadixyl	0.1 µg/l	Augres Tank	0.011	0.026	0.046	100
		Handois PS	0.035	0.054	0.083	100
Pendimethalin	0.1 µg/l	Augres Tank	<0.005	<0.005	<0.005	100
		Handois PS	<0.005	<0.005	0.005	100
Propiconazole	0.1 µg/l	Augres Tank	<0.005	<0.005	0.005	100
		Handois PS	<0.005	<0.005	0.005	100
Total Pesticides	0.5 µg/l	Augres Tank	0.021	0.038	0.072	100
		Handois PS	0.035	0.065	0.119	100

# Appendix 4: 2018 Service Reservoir Performance – Check Monitoring

Substances and parameters	Specific concentration or value (maximum) or state	Sample Point	Min	Mean	Max	% compliance	What it means
<i>E.coli</i>	0 per 100ml	Les Platons East SR	0	0	0	100	Bacteria which are indicative of faecal pollution.
		Les Platons West SR	0	0	0	100	
		Westmount SR	0	0	0	100	
Coliform bacteria	0 per 100ml (95% of samples)	Les Platons East SR	0	0	0	100	These bacteria are widely distributed in the environment and provide a sensitive measure of microbiological quality. They are removed during the treatment process.
		Les Platons West SR	0	0	0	100	
		Westmount SR	0	0	0	100	
Colony counts	No abnormal change	Les Platons East SR	No abnormal change	No abnormal change	No abnormal change	100	A range of harmless bacteria that may be present in water supplies. These are monitored to ensure the efficiency of the treatment process and the cleanliness (increasing trends in the distribution system are investigated).
		Les Platons West SR				100	
		Westmount SR				100	
Residual disinfectant	No value mg Cl <sub>2</sub> /l	Les Platons East SR	0.08	0.29	0.68	100	Sufficient chlorine is added to all supplies to ensure the absence of harmful microorganisms.
		Les Platons West SR	0.11	0.29	0.73	100	
		Westmount SR	0.09	0.17	0.32	100	

# Appendix 5: 2018 Water Quality in the Supply Zone – Check Monitoring

Substances and parameters	Specific concentration or value (maximum) or state	Min	Mean	Max	% compliance	What it means
<i>E.coli</i>	0 per 100ml	0	0	0	100	Bacteria which are indicative of faecal pollution
Coliform bacteria	0 per 100ml	0	0	0	100	These bacteria are widely distributed in the environment and provide a sensitive measure of microbiological quality. They are removed during the treatment process.
Residual disinfectant	No value mg Cl <sub>2</sub> /l	<0.02	0.22	0.54		Chlorine is added to our water along with ammonia to form a stable chloramine disinfectant compound, to ensure that there are no harmful bacteria in the water we supply.
Aluminium	200 µg Al/l	<5.0	11.4	54.6	100	Occurs naturally in many water resources. Aluminium compounds are also used at some water treatment works to remove impurities, but are themselves removed in the process.
Ammonium	0.50 mg NH <sub>4</sub> /l	<0.01	0.04	0.14	100	May be naturally present in some waters and is not harmful.
Colony counts	No abnormal change	No abnormal change			100	A range of harmless bacteria that may be present in water supplies. These are monitored to ensure the efficiency of the treatment process and the cleanliness (increasing trends in the distribution system are investigated)
Colour	20 mg/l Pt/Co	0.32	2.12	14.0	100	Water should be clear and bright but natural organic matter or pipework corrosion products may occasionally impart a slight tint.
Conductivity	2500 µS/cm at 20°C	446	533	593	100	A measure of the ability of the water to conduct an electric current and therefore a measurement of the mineral salts dissolved in the water.
<i>Clostridium Perfringens</i>	0 per 100ml	0	0	0	100	Bacteria which are indicative of faecal pollution

Substances and parameters	Specific concentration or value (maximum) or state	Min	Mean	Max	% compliance	What it means
Hydrogen ion	10.0 pH value 6.5 (min)	7.03	7.52	7.86	100	A measure of acidity or alkalinity. Excessively acidic or alkaline water can contribute to corrosion of pipes and fittings.
Iron	200 µg Fe/l	<3.0	12.3	89.8	100	Iron may be associated with the corrosion of old iron mains. The standard has been set for aesthetic reasons as levels persistently above the standard can give rise to discoloured water.
Manganese	50 µg Mn/l	<0.9	3.8	19.3	100	Occurs naturally in many water sources. The standard is set for aesthetic reasons as black deposits of manganese dioxide can give rise to discoloured water.
Nitrate	50 mg NO <sub>3</sub> /l	13.7	33.4	45.7	100	Nitrate arises from the use of fertilisers in agriculture and may be minimised by good practices and appropriate controls.
Nitrite	0.5 mg NO <sub>2</sub> /l	<0.003	0.033	0.129	100	Nitrite may be associated with nitrate or with the use of ammonia in water disinfection.
Nitrate/Nitrite ratio	1.000	0.300	0.680	0.919	100	The regulations specify that the ratio according to the following formula must not exceed 1, $[\text{nitrate}]/50 + [\text{nitrite}]/3$ , where the square brackets signify the concentrations in mg/l for nitrate (NO <sub>3</sub> ) and nitrite (NO <sub>2</sub> ) respectively.
Taste & Odour	3 at 20 °C Dilution number	0	0	0	100	The water is examined the water for unpleasant taste or odour. These are set for aesthetic reasons.
Turbidity	4 NTU	0.05	0.13	0.77	100	The standard requires that there should be no haziness caused by fine particles.
Cyanide	50 µg CN/l	<2.0	<2.0	<2.0	100	Very low levels may occur naturally, but higher amounts could be associated with industrial pollution. The standards are health related but have a large built-in safety factor.

# Appendix 6 - 2018 Water Quality in the Supply Zone – Audit Monitoring

Substances and parameters	Specific concentration or value (maximum) or state	Min	Mean	Max	% compliance	What it means
Antimony	5.0 µg Sb/l	<0.10	0.18	0.20	100	Very low levels may occur naturally, but higher amounts could be associated with industrial pollution. The standards are health related but have a large built-in safety factor.
Arsenic	10 µg As/l	<0.5	<0.5	<0.5	100	
Benzene	1.0 µg/l	<0.01	<0.01	<0.01	100	Benzene may be introduced into source water by industrial effluents or atmospheric pollution.
Benzo(a)pyrene	0.01 µg/l	<0.002	<0.002	<0.002	100	If detected, Benzo(a)pyrene is most likely the result of the deterioration of coal tar, which was historically used to line water mains. To our best knowledge coal tar lined pipes were never used in Jersey.
Boron	1.0 mg B/l	0.075	0.116	0.192	100	Very low levels may occur naturally, but higher amounts could be associated with industrial pollution. The standards are health related but have a large built-in safety factor.
Cadmium	5.0 µg Cd/l	<0.06	<0.06	<0.06	100	Very low levels may occur naturally, but higher amounts could be associated with industrial pollution. The standards are health related but have a large built-in safety factor.
Chromium	50 µg Cr/l	<0.3	<0.3	<0.3	100	
Copper	2000 µg Cu/l	<4	11	20	100	Any significant amount of copper is likely to come from corrosion of customers' pipes or fittings. Excess amounts can cause a metallic taste.
1,2 dichloroethane	3.0 µg/l	<0.04	<0.04	<0.04	100	The presence of this organic solvent is an indication of industrial pollution.
Enterococci	0 per 100 ml	0	0	0	100	Bacteria which are indicative of faecal pollution.

Substances and parameters	Specific concentration or value (maximum) or state	Min	Mean	Max	% compliance	What it means
Fluoride	1.5 mg F/l	0.03	0.04	0.08	100	Occurs naturally in many water sources. The standard is set to ensure no adverse effects. Jersey Water does not artificially fluoridate the water supply.
Gross Alpha	0.1 Bq/l	<0.020	<0.020	0.020	100	These parameters are measured as part of screening for radioactivity.
Gross Beta	1.0 Bq/l	<0.20	<0.20	<0.20	100	
Lead	10 µg Pb/l	<0.5	1.5	7.9	100	Absent in water entering supply but variable concentrations of lead may be found in water at the customer's tap in older properties built at a time when lead was commonly used in domestic plumbing systems. The standard recognises that the intake of lead should be minimised for health reasons.
Manganese	50 µg Mn/l	<0.9	3.8	19.3	100	Occurs naturally in many water sources. The standard is set for aesthetic reasons as black deposits of manganese dioxide can give rise to discoloured water.
Mercury	1.0 µg Hg/l	<0.02	<0.02	<0.02	100	Low levels of mercury may occur naturally in water after it has passed through various mineral deposits and rock strata. The standards are health-related and have a large safety factor built in. Mercury is rarely found in drinking water.
Nickel	20 µg Ni/l	0.7	1.1	1.5	100	Very low levels may occur naturally, but higher amounts could be associated with industrial pollution. The standards are health related but have a large built-in safety factor.
Total Polycyclic aromatic hydrocarbons (PAH's)	0.1 µg/l	<0.008	<0.008	<0.008	100	Polycyclic aromatic hydrocarbons is a group name for several substances present in petroleum based products such as coal tar, which was historically used to line water mains. To our best knowledge coal tar lined pipes were never used in Jersey.

Substances and parameters	Specific concentration or value (maximum) or state	Min	Mean	Max	% compliance	What it means
Selenium	10 µg Se/l	0.5	1.1	1.8	100	Low levels of selenium may occur naturally in water after it has passed through various mineral deposits and rock strata. Selenium is an essential element and is required as part of the diet.
Sodium	200 mg Na/l	52.3	61.7	68.5	100	Sodium occurs naturally in water after passing through certain mineral deposits and rock strata or in brackish groundwater. Sodium salts are used extensively in the home and in industrial processes.
Sum of Trichloroethene & Tetrachloroethene	10 µg/l	<0.10	<0.10	<0.10	100	These substances are organic solvents, their presence is an indication of industrial pollution.
Tetrachloromethane	3 µg/l	<0.04	<0.04	<0.04	100	
Total Trihalomethanes (THM's)	100 µg/l	7.50	16.58	23.30	100	THM's are formed by the reaction of chlorine added as a disinfectant with naturally occurring organic compounds in the water.
Chloride	250 mg Cl/l	56	65	74	100	Chloride can occur naturally in source water and is a component of common salt. The standard is not health-related, but set to avoid taste and corrosion potential.
Sulfate	250 mg SO <sub>4</sub> /l	81	91	100	100	Occurs naturally in many source waters after contact with particular mineral deposits and rock strata. The concentrations normally found in drinking water do not represent a risk to health.
Total organic carbon	No abnormal change mg/l	1.4	1.7	2.1	100	This parameter provides a measure of the total amount of organic matter in water.

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Jersey Water is the trading name of The Jersey New Waterworks Company Limited.

