

Statistical Digest

Company Performance

Number of tests for statutory monitoring purposes carried out	39,613
Number of tests taken for operational purposes	4,084
Total Number of Tests	43,697

Population Served

Population Supplied	84,497
Consumer Complaints per 1000 people supplied	1.78

Cost to the Domestic Customer

Average Yearly Domestic Water Bill	£449.67
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Company Assets

Number of Treatment Works	2
Number of Operational Service Reservoirs	29
Number of Water Supply Zones	2
Number of Water Quality Zones	13
Length of mains pipe (Km)	1802.67

Water Supplied

Water supplied (MI/day)	28.136
From surface sources (100%)	100

Quality of water leaving water treatment works

Table 1.1

Parameter	Total Number of Tests	Prescribed Concentration or Value	Min	Max	Number of Failures
Coliform bacteria	414	0/100ml	0	0	0
Escherichia coli	414	0/100ml	0	0	0
Cryptosporidium oocysts	104	<1 oocysts per 10 litres	0	0.01	0
TOTAL	932	-			

Quality of water leaving water treatment works (Cont)

Table 1.2

Parameter	Total Number of Tests	Prescribed Concentration or Value	Minimum	Maximum	Average	Number of Failures
Clostridium perfringens	106	0/100ml	0	0	0	0
Colony Counts @ 22°C	414	15/ml (IOMWA Specification)	0	13	0.09	0
Colony Counts @ 37°C	414	2/ml (IOMWA Specification)	0	3	0.02	1
Residual disinfectant (Total chlorine) mg/l	414	-	0.70	1.43	1.05	0
Turbidity	414	1 NTU	0.04	0.61	0.06	0
TOTAL	1762					

Quality of water leaving water treatment works

Table 1.3

Parameter	Sample no:	Spec Limit	Units of Measure	No:fails	Average	Minimum	Maximum
1,2-Dichloroethane	16	3	ug/l	0	0.65	0.2	3
Alkalinity (as HCO₃)	24	-	mg/l	0	17.56	8.23	27.5
Benzene	16	1	ug/l	0	0.29	0.05	1
Boron	24	1000	ug/l	0	14.78	13	20
Colour	414	10	Hazen	0	1.03	1	1.9
Chloride	24	250	mg/l	0	18.83	14.8	21.7
Conductivity	122	2500	uS/cm	0	155.87	128.8	201
Fluoride	24	1500	ug/l	0	28.07	20	50
Hardness (total as Ca/l)	14	-	mg/l	0	42.67	29.3	84.8
Mercury	24	1	ug/l	0	0.06	0.05	0.1
Nitrate (NO₃)	24	50	mg/l	0	1.12	0.64	2.18
Nitrite (NO₂)	24	0.1	mg/l	0	0.05	0.05	0.05
pH	414	9.5	no units	1	7.97	6.7	9.7
Phosphorus	106	0.5-2.2	mg/l	8	0.85	0.07	1.77
Sodium	24	200	mg/l	0	11.97	9.94	13.9
Sulphate (SO₄)	24	250	mg/l	0	26.17	18	37.8
Total Organic Carbon	24	5	mg/l	0	2.36	0.67	15
Turbidity	414	1	NTU	0	0.06	0.04	0.61
Tetrachloroethene	16	10	ug/l	0	0.91	0.2	5
Tetrachloromethane	16	3	ug/l	0	0.58	0.1	3
Trichloroethene	16	10	ug/l	0	0.91	0.2	5
1,1,1 Trichloroethane	16	10	ug/l	0	1.46	0.1	10

Quality of water leaving water treatment works (cont)

Table 1.4

Metals	Sample no:	Spec Limit	Units of Measure	No:fails	Average	Minimum	Maximum
Aluminium	106	200	ug/l	0	19.93	10	22.6
Iron	106	200	ug/l	0	21.84	20	162
Manganese	106	50	ug/l	0	5.1	5	7.7
Cadmium	24	5	ug/l	0	0.5	0.5	0.5
Selenium	16	10	ug/l	0	4.12	1	10
Copper	24	2000	ug/l	0	20	20	20
Zinc	24	-	ug/l	0	20	20	20
Lead	24	25	ug/l	0	5	5	5

Quality of water leaving water treatment works

Table 1.5

THMs	Sample no:	Spec Limit	Units of Measure	No:fails	Average	Minimum	Maximum
Bromodichloromethane	16	100	ug/l	0	4.76	1	10
Bromoform	16	100	ug/l	0	2.13	0.3	10
Chloroform	16	100	ug/l	0	7.53	2.39	13.08
Trihalomethanes (total)	16	100	ug/l	0	18.58	10.17	40
Dibromochloromethane	16	100	ug/l	0	4.3	1.97	10

Quality of water leaving Service Reservoirs

Table 2.1

Parameter	Prescribed Concentration or Value	Total Number of Tests	Tests Failed	Number of service reservoirs with coliforms detected in more than 5% of samples
Coliform bacteria	0/100ml	1443	2	0
Escherichia coli	0/100ml	1443	0	0
TOTAL	-	2886	2	0

Quality of water leaving Service Reservoirs

Table 2.2

Parameter	IOMWA Specification	Total Number of Tests	Minimum	Maximum	Average
Colony Counts @ 22°C	100/ml	1443	0.00	149	0.72
Colony Counts @ 37°C	10/ml	1443	0.00	36	0.04
Residual disinfectant (Total chlorine) mg/l	-	1443	0.01	1.32	0.65
TOTAL	-	4329	-	-	-

Quality of water at Consumer's taps (Water Quality Zones)

Table 3.1

Parameter	Sample no:	Spec Limit	Units of Measure	No:fails	Average	Minimum	Maximum
1,2-Dichloroethane	92	3	ug/l	0	0.67	0.2	3
Ammonium (NH4)	192	0.5	mg/l	0	0.02	0.02	0.12
Arsenic	92	10	ug/l	0	1.39	0.12	5
Benzene	92	1	ug/l	0	0.3	0.12	1
Benzo (a) Pyrene	91	10	ng/l	0	1.56	0.4	5
Bromate	92	10	ug/l	0	2.12	1.2	3
Colour	192	20	Hazen	0	1.01	1	1.4
Fluoranthene	91	100	ng/l	2	14.17	3	251.84
Nitrate (NO3)	92	50	mg/l	0	1.28	0.62	2.23
Nitrite (NO2)	92	0.5	mg/l	0	0.05	0.05	0.05
pH	309	6.5-9.5	no units	0	7.51	6.5	9
Phosphorus	192	>0.5 -2.2	mg/l	0	0.87	0.51	1.29
Sodium	92	200	mg/l	0	12.88	10.1	15
Turbidity	192	4	NTU	0	0.09	0.04	2.25
Tetrachloroethene	92	10	ug/l	0	0.99	0.2	5
Tetrachloromethane	92	3	ug/l	0	0.59	0.1	3
Trichloroethene	92	10	ug/l	0	1.06	0.2	10
1,1,1 Trichloroethane	92	-	ug/l	0	1.53	0.1	10

Quality of water at Consumer's taps (Water Quality Zones)

Table 3.2

Metals	Sample no:	Spec Limit	Units of Measure	No:fails	Average	Minimum	Maximum
Aluminium	192	200	ug/l	0	20.03	20	24.6
Iron	192	200	ug/l	1	23.91	10	524
Manganese	192	50	ug/l	0	5.17	5	31.8
Antimony	92	5	ug/l	0	1	1	1
Cadmium	192	5	ug/l	0	0.55	0.5	5
Selenium	92	10	ug/l	0	5	5	5
Copper	192	2000	ug/l	0	20.46	20	47.2
Nickel	192	20	ug/l	0	5	5	5
Zinc	192	3000	ug/l	0	20.19	20	47.5
Lead	189	25	ug/l	0	5.01	1	11

Quality of water at Consumer's taps (Water Quality Zones)

Table 3.3

Polyaromtic hydrocarbons (PAHs)	Sample no:	Spec Limit	Units of Measure	No:fails	Average	Minimum	Maximum
Benzo (b) Fluoranthene	91	100	ng/l	0	2.57	0.88	52
Benzo (ghi) perylene	91	100	ng/l	0	2.24	1.3	5
Benzo (k) Fluoranthene	91	100	ng/l	0	1.71	0.6	5
Indeno (1,2,3-cd) Pyrene	91	100	ng/l	0	1.84	0.7	5
Polyaromatic Hydrocarbons (total)	91	0.1	ug/l	2	0.02	0	0.25

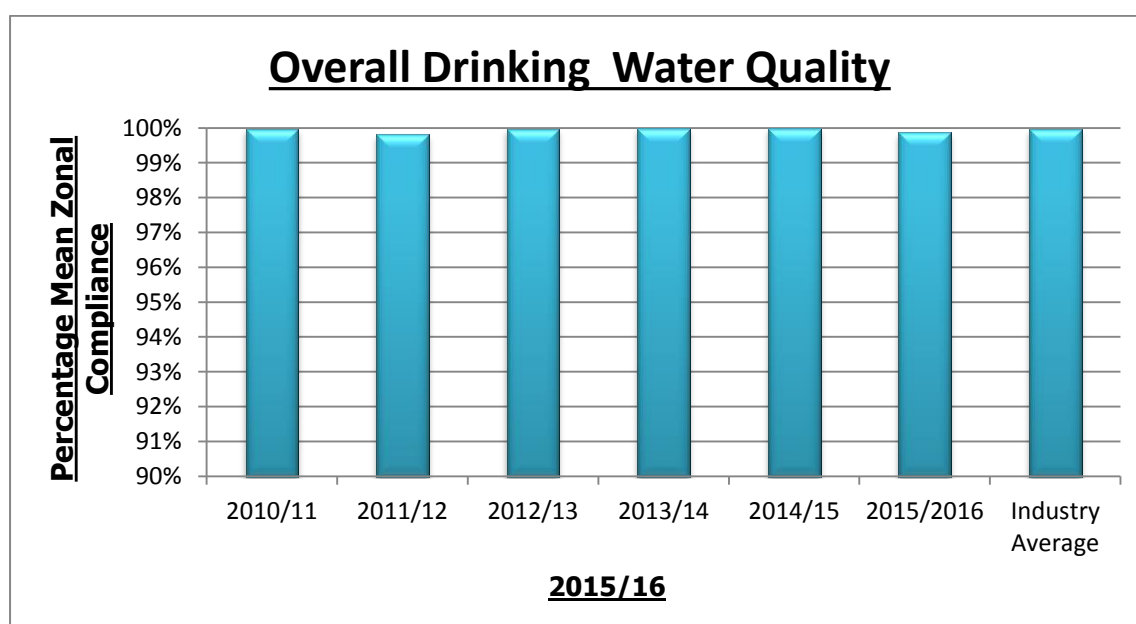
Quality of water at Consumer's taps (Water Quality Zones)

Table 3.4

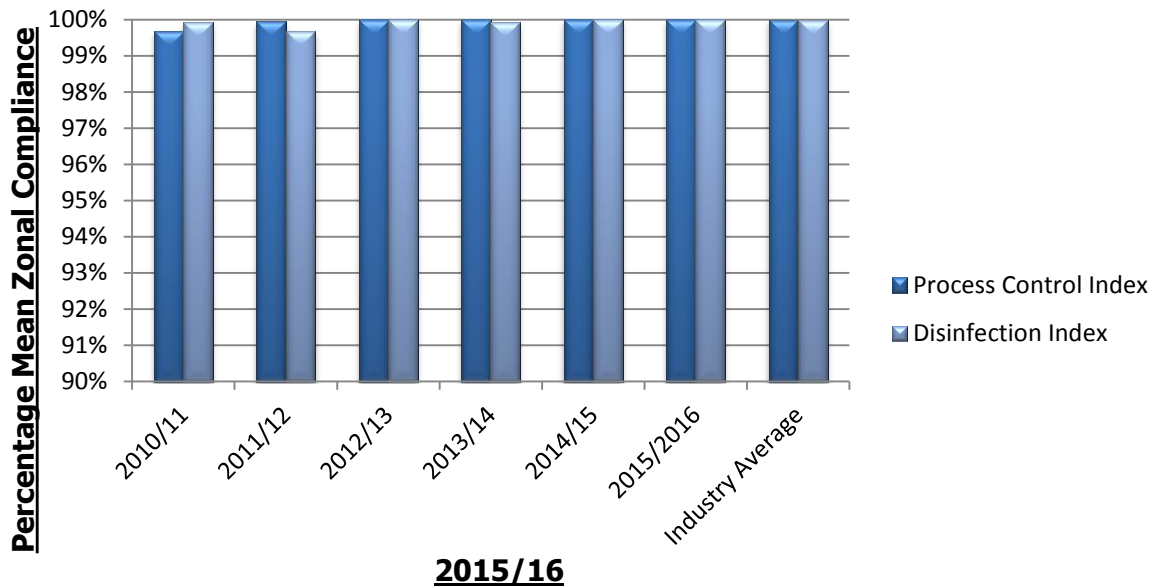
Trihalomethanes (THMs)	Sample no:	Spec Limit	Units of Measure	No:fails	Average	Minimum	Maximum
Bromodichloromethane	92	100	ug/l	0	9.04	3.94	18.1
Bromoform	92	100	ug/l	0	2.89	0.3	10
Chloroform	92	100	ug/l	0	13.64	2.67	28.45
Trihalomethanes (total)	92	100	ug/l	0	32.38	4	60
Dibromochloromethane	92	100	ug/l	0	7.17	3.8	18.1

Table 4

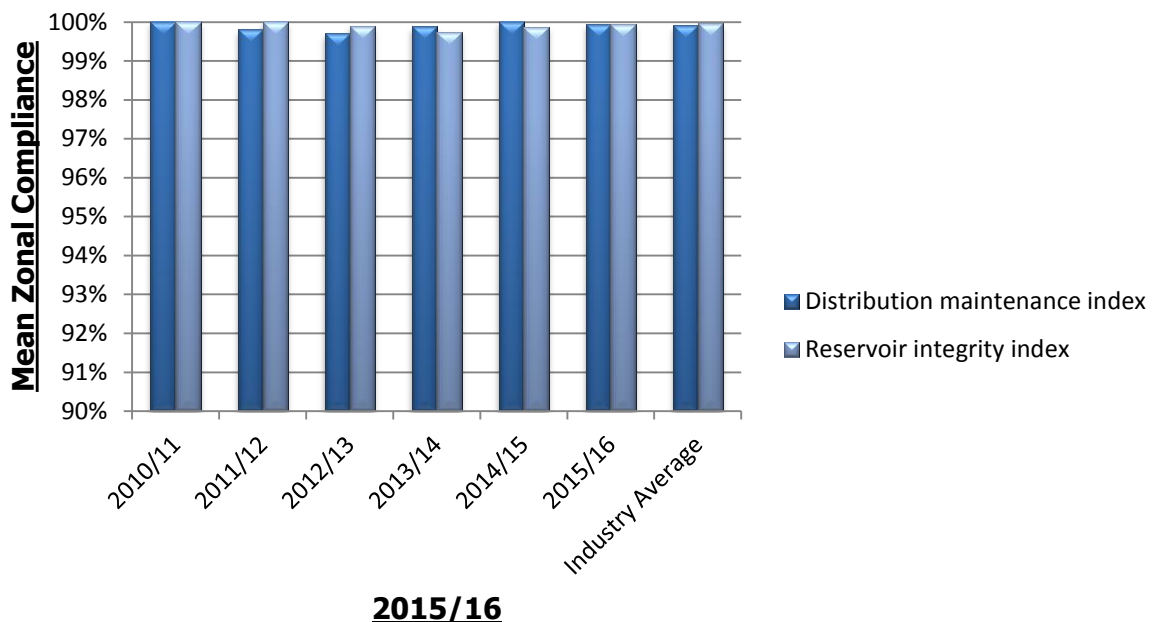
	Manx Utilities						England and Wales Industry Average
	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2015
Overall Drinking Water Quality	99.97%	99.82%	99.97%	100.00%	100.00%	99.88%	99.96%
Water Treatment							
Process Control Index	99.67%	99.95%	100.00%	100.00%	100.00%	100.00%	99.99%
Disinfection Index	99.93%	99.67%	100.00%	99.92%	100.00%	100.00%	99.97%
Distribution systems							
Distribution maintenance index	100.00%	99.80%	99.71%	99.89%	100.00%	99.94%	99.91%
Reservoir integrity index	100.00%	100.00%	99.90%	99.74%	99.87%	99.93%	99.96%
Building Water systems							
Parameters influenced by domestic water systems	99.94%	99.96%	99.97%	99.97%	99.97%	99.94%	99.85%



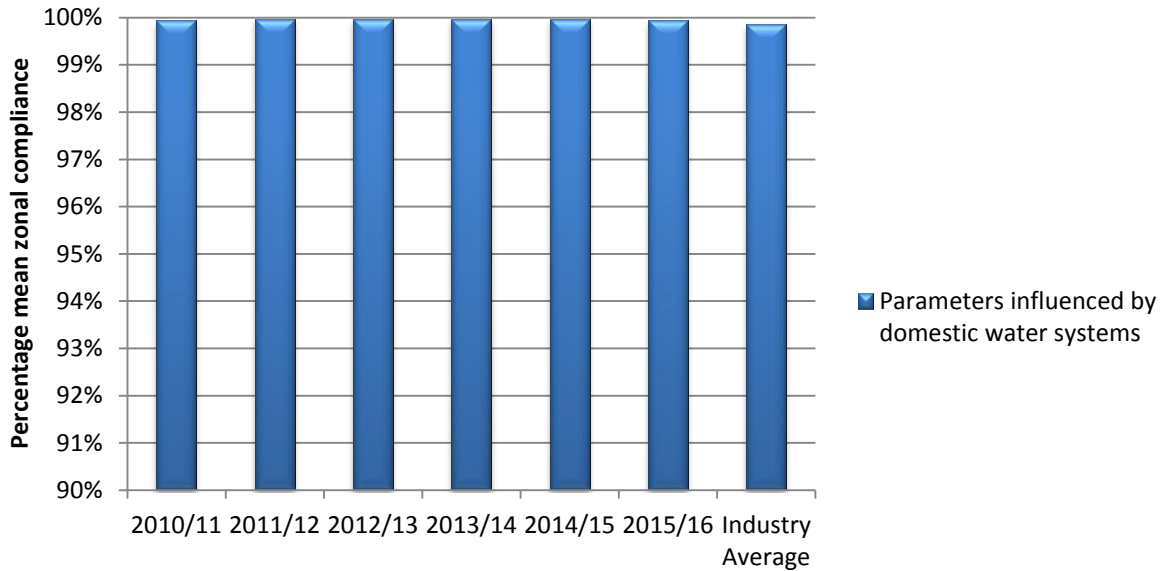
Water Treatment Indices



Distribution Maintenance Index



Building Water Systems Index



2015/16

The graphs illustrated in this year's Water Quality report have been compiled in line with the Drinking Water Inspectorate's (DWI) report in order to compare our quality data against the industry average across England and Wales.

Each quality index is comprised of parameters, which are appropriate as indicators for each area of significance. All these indices are calculated by taking the average of the Mean Zonal compliance figures for each parameter.