

Data summary tables for Essex and Suffolk Water (ESK)

These tables contain a summary of results of monitoring undertaken by the water company in 2017 and submitted to the Drinking Water Inspectorate. The tables are published by the Inspectorate as part of the Chief Inspector's Report entitled *Drinking water 2017*.

The tables and full content of the Drinking Water Inspectorate's annual report are available on the Inspectorate's website at <http://www.dwi.defra.gov.uk>

Notes relating to the interpretation of the tables:

Columns on the following tables that are headed '1 percentile representing a minimum' and '99 percentile representing a maximum' contain figures for the 1 percentile and 99 percentile sample results respectively except where less than 100 samples were taken, when the figures are the actual maximum and minimum results.

The symbol < indicates that the result was less than the limit of detection of the analytical method used.

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Site Summary Data for Essex & Suffolk Water

Report Date Range: For the whole year 2017

Table ESK 1: Quality of water leaving treatment works - European Standards

Parameter Name	Parameter Code	Prescribed Concentration or Value	Total Number of Tests	Tests Failed	1 percentile (representing a minimum)	99 percentile (representing a maximum)	No. of works with failures
Nitrite (Total)	A013B	0.1 mg NO ₂ /l	2,866	0	< 0.0029	< 0.0029	0
Totals:			2,866	0			

Table ESK 2: Quality of water leaving treatment works - National Standards

Parameter Name	Parameter Code	Prescribed Concentration or Value	Total Number of Tests	Tests Failed	1 percentile (representing a minimum)	99 percentile (representing a maximum)	No. of works with failures
E coli (faecal coliforms Confirmed)	C002	0 number/100 ml	3,666	0	0	0	0
Total Coliforms (Confirmed)	C001	0 number/100 ml	3,666	0	0	0	0
Totals:			7,332	0			

Table ESK 3: Quality of water leaving treatment works - Additional Monitoring Requirements

Parameter Name	Parameter Code	Prescribed Concentration or Value	Total Number of Tests	Tests exceeding specification	1 percentile (representing a minimum)	99 percentile (representing a maximum)
Colony Counts After 3 Days At 22°C (Colony Counts)	C007	No abnormal change	3,656	-n/a	0	6
Colony Counts After 48 Hours At 37°C (Colony Counts)	C013	No abnormal change	304	-n/a	0	8
Residual Disinfectant - Total	C010	No abnormal change	3,691	-n/a	0.47	1.37
Turbidity - Indicator	A002A	1 nephelometric turbidity units	3,674	1	0.072	0.19
Totals:			11,325	1		

Table ESK 4: Quality of water leaving service reservoirs - National Standards

Parameter Name	Parameter Code	Prescribed Concentration or Value	Total Number of Tests	Tests Failed	1 percentile (representing a minimum)	99 percentile (representing a maximum)	No. of reservoirs failing standard
E coli (faecal coliforms Confirmed)	C002	0 number/100 ml	4,809	0	0	0	0
Total Coliforms (Confirmed)	C001	0 number/100 ml	4,809	2	0	0	0
Totals:			9,618	2			

Table ESK 5: Quality of water leaving service reservoirs - Additional Monitoring Requirements

Parameter Name	Parameter Code	Prescribed Concentration or Value	Total Number of Tests	Tests exceeding specification	1 percentile (representing a minimum)	99 percentile (representing a maximum)
Colony Counts After 3 Days At 22øc (Colony Counts)	C007	No abnormal change	4,791	-n/a	0	250
Colony Counts After 48 Hours At 37øc (Colony Counts)	C013	No abnormal change	397	-n/a	0	23
Residual Disinfectant - Total	C010	No abnormal change	4,814	-n/a	0.11	1
Totals:			10,002	0		

Table ESK 6: Quality of water leaving bulk supply points - European Standards

Parameter Name	Parameter Code	Prescribed Concentration or Value	Total Number of Tests	Tests Failed	1 percentile (representing a minimum)	99 percentile (representing a maximum)	No. of supply points with failures
1 2-Dichloroethane (Total)	F001	3 µg/l	68	0	< 0.024	< 0.024	0
Benzene (Total)	F002	1 µg/l	68	0	< 0.013	< 0.013	0
Boron	D005A	1 mg B/l	68	0	< 0.0034	0.087	0
Cyanide (Total)	B003	50 µg CN/l	68	0	< 1.7	8.9	0
Fluoride (Total)	A027	1.5 mg F/l	68	0	0.19	0.41	0
Mercury (Total)	B005	1 µg Hg/l	68	0	< 0.011	< 0.055	0
Pesticides (Total by Calculation)	B010	0.5 µg/l	68	0	0.0268	0.195	0
Pesticides 2 4-D	P020	0.1 µg/l	68	0	< 0.0011	0.014	0
Pesticides 2 4-DB	P082	0.1 µg/l	68	0	< 0.0034	0.012	0
Pesticides 2,4,5-T	P076	0.1 µg/l	68	0	< 0.0013	0.0016	0
Pesticides Aldrin	P002	0.03 µg/l	68	0	< 0.0022	< 0.0022	0
Pesticides Aminomethylphosphonic acid	P273	0.1 µg/l	68	0	< 0.0031	0.0079	0
Pesticides Asulam	P133	0.1 µg/l	68	0	< 0.0049	0.02	0
Pesticides Atrazine	P004	0.1 µg/l	68	0	< 0.0025	< 0.013	0
Pesticides Bentazone	P006	0.1 µg/l	68	0	< 0.00073	0.03	0
Pesticides Carbetamide	P010	0.1 µg/l	68	0	< 0.0018	0.0074	0
Pesticides Chloridazon	P162	0.1 µg/l	68	0	< 0.0015	< 0.0015	0
Pesticides Chlormequat	P163	0.1 µg/l	68	0	< 0.0059	0.0062	0
Pesticides Chlorothalonil	P015	0.1 µg/l	68	0	< 0.0098	< 0.0098	0
Pesticides Chlortoluron	P014	0.1 µg/l	68	0	< 0.0019	< 0.0019	0
Pesticides Clopyralid	P018	0.1 µg/l	68	0	< 0.0039	0.057	0
Pesticides Dicamba	P025	0.1 µg/l	68	0	< 0.012	< 0.012	0
Pesticides Dichlorprop	P026	0.1 µg/l	68	0	< 0.0013	0.0039	0
Pesticides Dieldrin	P028	0.03 µg/l	68	0	< 0.0025	< 0.0025	0
Pesticides Diuron	P032	0.1 µg/l	68	0	< 0.0033	0.0059	0
Pesticides Ethofumersate	P221	0.1 µg/l	68	0	< 0.001	< 0.013	0
Pesticides Fenpropidin	P168	0.1 µg/l	68	0	< 0.0036	< 0.018	0
Pesticides Fenpropimorph	P037	0.1 µg/l	68	0	< 0.0027	< 0.014	0
Pesticides Flufenacet	P230	0.1 µg/l	68	0	< 0.02	0.037	0
Pesticides Fluroxypyr	P040	0.1 µg/l	68	0	< 0.0052	0.02	0
Pesticides Glyphosate	P042	0.1 µg/l	68	0	< 0.0034	0.0043	0
Pesticides Heptachlor	P043	0.03 µg/l	68	0	< 0.0048	< 0.0048	0
Pesticides Heptachlor Epoxide - Total (Trans, CIS) (Heptachlor Epoxide)	P044	0.03 µg/l	68	0	0	0	0
Pesticides Hexachlorobenzene	P045	0.1 µg/l	68	0	< 0.0056	< 0.0056	0
Pesticides Isoproturon	P048	0.1 µg/l	68	0	< 0.0017	< 0.0017	0

Table ESK 6: Quality of water leaving bulk supply points - European Standards

Parameter Name	Parameter Code	Prescribed Concentration or Value	Total Number of Tests	Tests Failed	1 percentile (representing a minimum)	99 percentile (representing a maximum)	No. of supply points with failures
Pesticides Lenacil	P109	0.1 µg/l	68	0	< 0.0018	0.018	0
Pesticides Linuron	P051	0.1 µg/l	68	0	< 0.0055	< 0.0055	0
Pesticides MCPA 4-chloro-o-tolyloxyacetic acid	P054	0.1 µg/l	68	0	< 0.00055	0.0062	0
Pesticides MCPB	P055	0.1 µg/l	68	0	< 0.0041	< 0.0041	0
Pesticides MCPP (Mecoprop)	P053	0.1 µg/l	68	0	< 0.0013	0.0049	0
Pesticides Metaldehyde	P226	0.1 µg/l	68	0	< 0.0061	0.086	0
Pesticides Metamitron	P194	0.1 µg/l	68	0	< 0.0032	< 0.0032	0
Pesticides Metazachlor	P203	0.1 µg/l	68	0	< 0.003	< 0.015	0
Pesticides Oxamyl	P263	0.1 µg/l	68	0	< 0.02	< 0.02	0
Pesticides Pendimethalin	P118	0.1 µg/l	68	0	< 0.0025	0.022	0
Pesticides Pentachlorophenol	P060	0.1 µg/l	68	0	< 0.0019	< 0.0019	0
Pesticides Picloram (Total)	P122	0.1 µg/l	68	0	< 0.0035	< 0.0035	0
Pesticides Propyzamide	P071	0.1 µg/l	68	0	< 0.0022	0.014	0
Pesticides Quinmerac	P244	0.1 µg/l	68	0	< 0.0016	0.021	0
Pesticides Terbutryn	P077	0.1 µg/l	68	0	< 0.0022	< 0.011	0
Pesticides Triclopyr	P131	0.1 µg/l	68	0	< 0.0035	0.0068	0
Radon	F031	100 Bq/l	11	0	< 10	< 10	0
Trichloroethene & Tetrachloroethene - Sum Of 2 Substances (Total by Calculation)	D009B	10 µg/l	68	0	0	0	0
Totals:			3,547	0			

Table ESK 7: Quality of water leaving bulk supply points - National Standards

Parameter Name	Parameter Code	Prescribed Concentration or Value	Total Number of Tests	Tests Failed	1 percentile (representing a minimum)	99 percentile (representing a maximum)	No. of supply points with failures
Tetrachloromethane (Total)	D008	3 µg/l	68	0	< 0.025	< 0.025	0
Totals:			68	0			

Table ESK 8: Quality of water leaving bulk supply points - Additional Monitoring Requirements

Parameter Name	Parameter Code	Prescribed Concentration or Value	Total Number of Tests	Tests exceeding specification	1 percentile (representing a minimum)	99 percentile (representing a maximum)
Chloride	D002A	250 mg Cl/l	68	0	61	90
Gross Alpha	F004	0.1 Bq/l	68	0	0.015	0.08
Gross Beta	F005	1 Bq/l	68	0	0.063	0.304
Sulphate	A007	250 mg SO ₄ /l	68	0	57	120
Total Organic Carbon	A017	No abnormal change	68	-n/a	1.8	3.8
Tritium	F006	100 Bq/l	68	0	< 10	< 10
Totals:			408	0		

Table ESK 9: Quality of water at consumer's tap (zones) - European Standards

Parameter Name	Parameter Code	Prescribed Concentration or Value	Total Number of Tests	Tests Failed	1 percentile (representing a minimum)	99 percentile (representing a maximum)	No. of zones failing standard
1 2-Dichloroethane (Total)	F001	3 µg/l	134	0	< 0.024	< 0.0539	0
Antimony	B008A	5 µg Sb/l	326	0	< 0.08	0.6719	0
Arsenic (Total)	B001A	10 µg As/l	326	0	0.088	1.873	0
Benzene (Total)	F002	1 µg/l	134	0	< 0.013	< 0.01755	0
Benzo[a]Pyrene (Total)	D007	0.01 µg/l	325	0	< 0.00056	0.0007872	0
Boron	D005A	1 mg B/l	134	0	0.01635	0.143	0
Bromate	F003	10 µg BrO3/l	326	0	< 0.3	3.784	0
Cadmium (Total)	B002	5 µg Cd/l	326	0	< 0.009	0.05592	0
Chromium (Total)	B004	50 µg Cr/l	326	0	< 0.044	0.16	0
Copper (Total)	A024A	2 mg Cu/l	326	2	0.0013	0.7187	2
Cyanide (Total)	B003	50 µg CN/l	134	0	< 1.7	17	0
E coli (faecal coliforms Confirmed)	C002	0 number/100 ml	4,712	5	0	0	4
Enterococci (Confirmed)	C003	0 number/100 ml	326	0	0	0	0
Fluoride (Total)	A027	1.5 mg F/l	134	0	0.09375	0.895	0
Lead (10 - will apply 25.12.2013)	B007B	10 µg Pb/l	326	2	< 0.033	8.53	2
Mercury (Total)	B005	1 µg Hg/l	134	0	< 0.011	< 0.055	0
Nickel (Total)	B006A	20 µg Ni/l	326	1	0.08797	13.19	1
Nitrate (Total)	A012	50 mg NO3/l	1,519	0	1.72	45	0
Nitrite - Consumer's Taps	A013A	0.5 mg NO2/l	1,519	0	< 0.0029	0.36	0
Nitrite/Nitrate formula	A013C	1 mg NO2/l	1,519	0	< 0.04	< 0.9	0
Pesticides (Total by Calculation)	B010	0.5 µg/l	135	0	0	0.20212	0
Pesticides 2 4-D	P020	0.1 µg/l	134	0	< 0.0011	0.013	0
Pesticides 2 4-DB	P082	0.1 µg/l	134	0	< 0.0034	0.01046	0
Pesticides 2,4,5-T	P076	0.1 µg/l	134	0	< 0.0013	0.005045	0
Pesticides Aldrin	P002	0.03 µg/l	134	0	< 0.0022	< 0.0022	0
Pesticides Aminomethylphosphonic acid	P273	0.1 µg/l	134	0	< 0.0031	0.05425	0
Pesticides Asulam	P133	0.1 µg/l	134	0	< 0.0049	0.011915	0
Pesticides Atrazine	P004	0.1 µg/l	134	0	< 0.0025	< 0.0025	0
Pesticides Bentazone	P006	0.1 µg/l	134	0	< 0.00073	0.0279	0
Pesticides Carbetamide	P010	0.1 µg/l	134	0	< 0.0018	0.00739	0
Pesticides Chloridazon	P162	0.1 µg/l	134	0	< 0.0015	0.01795	0
Pesticides Chlormequat	P163	0.1 µg/l	134	0	< 0.0059	< 0.0059	0
Pesticides Chlorothalonil	P015	0.1 µg/l	134	0	< 0.0098	< 0.0098	0
Pesticides Chlortoluron	P014	0.1 µg/l	134	0	< 0.0019	0.00463	0
Pesticides Clopyralid	P018	0.1 µg/l	134	0	< 0.0039	0.0393	0
Pesticides Dicamba	P025	0.1 µg/l	134	0	< 0.012	0.013	0

Table ESK 9: Quality of water at consumer's tap (zones) - European Standards

Parameter Name	Parameter Code	Prescribed Concentration or Value	Total Number of Tests	Tests Failed	1 percentile (representing a minimum)	99 percentile (representing a maximum)	No. of zones failing standard
Pesticides Dichlorprop	P026	0.1 µg/l	134	0	< 0.0013	0.0136	0
Pesticides Dieldrin	P028	0.03 µg/l	134	0	< 0.0025	< 0.0025	0
Pesticides Diuron	P032	0.1 µg/l	134	0	< 0.0033	0.00412	0
Pesticides Ethofumersate	P221	0.1 µg/l	134	0	< 0.001	< 0.013	0
Pesticides Fenpropidin	P168	0.1 µg/l	135	0	< 0.0036	< 0.0036	0
Pesticides Fenpropimorph	P037	0.1 µg/l	135	0	< 0.0027	< 0.0027	0
Pesticides Flufenacet	P230	0.1 µg/l	134	0	< 0.02	0.0493	0
Pesticides Fluroxypyr	P040	0.1 µg/l	134	0	< 0.0052	0.01595	0
Pesticides Glyphosate	P042	0.1 µg/l	134	1	< 0.0034	0.112495	1
Pesticides Heptachlor	P043	0.03 µg/l	134	0	< 0.0048	< 0.0048	0
Pesticides Heptachlor Epoxide - Total (Trans, CIS) (Heptachlor Epoxide)	P044	0.03 µg/l	134	0	0	0	0
Pesticides Hexachlorobenzene	P045	0.1 µg/l	134	0	< 0.0056	< 0.0056	0
Pesticides Isoproturon	P048	0.1 µg/l	134	0	< 0.0017	0.00719	0
Pesticides Lenacil	P109	0.1 µg/l	134	0	< 0.0018	0.04815	0
Pesticides Linuron	P051	0.1 µg/l	134	0	< 0.0055	< 0.0055	0
Pesticides MCPA 4-chloro-o-tolyloxyacetic acid	P054	0.1 µg/l	134	0	< 0.00055	0.00971	0
Pesticides MCPB	P055	0.1 µg/l	134	0	< 0.0041	< 0.0041	0
Pesticides MCPP (Mecoprop)	P053	0.1 µg/l	134	0	< 0.0013	0.008425	0
Pesticides Metaldehyde	P226	0.1 µg/l	134	0	< 0.0061	0.06865	0
Pesticides Metamitron	P194	0.1 µg/l	134	0	< 0.0032	< 0.0032	0
Pesticides Metazachlor	P203	0.1 µg/l	135	0	< 0.003	0.004468	0
Pesticides Oxamyl	P263	0.1 µg/l	134	0	< 0.02	< 0.02	0
Pesticides Pendimethalin	P118	0.1 µg/l	134	0	< 0.0025	0.0042	0
Pesticides Pentachlorophenol	P060	0.1 µg/l	134	0	< 0.0019	0.008815	0
Pesticides Picloram (Total)	P122	0.1 µg/l	134	0	< 0.0035	< 0.0035	0
Pesticides Propyzamide	P071	0.1 µg/l	134	0	< 0.0022	0.01365	0
Pesticides Quinmerac	P244	0.1 µg/l	135	0	< 0.0016	0.01564	0
Pesticides Terbutryn	P077	0.1 µg/l	134	0	< 0.0022	0.002465	0
Pesticides Triclopyr	P131	0.1 µg/l	134	0	< 0.0035	0.004355	0
Polycyclic Aromatic Hydrocarbons (Total by Calculation)	B011F	0.1 µg/l	325	0	0	0.0057312	0
Selenium (Total)	B009	10 µg Se/l	326	0	< 0.16	3.5	0
Trichloroethene & Tetrachloroethene - Sum Of 2 Substances (Total by Calculation)	D009B	10 µg/l	134	0	0	0	0
Trihalomethanes (Total by Calculation)	D011	100 µg/l	326	0	6.827	51.041	0
Totals:			20,478	11			

Table ESK 10: Quality of water at consumer's tap (zones) - National Standards

Parameter Name	Parameter Code	Prescribed Concentration or Value	Total Number of Tests	Tests Failed	1 percentile (representing a minimum)	99 percentile (representing a maximum)	No. of zones failing standard
Aluminium (Total)	A021	200 µg Al/l	1,519	0	< 6.6	22	0
Colour	A001	20 mg/l Pt/Co scale	1,588	0	< 0.93	2.5	0
Iron (Total)	A022	200 µg Fe/l	1,519	4	< 1.2	46.4	4
Manganese (Total)	A023	50 µg Mn/l	1,519	0	< 0.18	2.9	0
Odour	A003	0 Dilution number	1,144	6	0	0	6
Sodium (Total)	A009	200 mg Na/l	326	0	16	75.65	0
Taste (Taste Quant)	A004	0 Dilution number	1,144	2	0	0	2
Tetrachloromethane (Total)	D008	3 µg/l	134	0	< 0.02175	< 0.0289	0
Turbidity	A002	4 nephelometric turbidity units	1,588	0	0.084	0.3211	0
Totals:			10,481	12			

Table ESK 11: Quality of water at consumer's tap (zones) - Additional Monitoring Requirements

Parameter Name	Parameter Code	Prescribed Concentration or Value	Total Number of Tests	Tests exceeding specification	1 percentile (representing a minimum)	99 percentile (representing a maximum)
Ammonium (Total)	A014	0.5 mg NH ₄ /l	1,588	1	< 0.0072	0.26
Chloride	D002A	250 mg Cl/l	136	0	30.85	132.6
Clostridium Perfringens	C004A	0 number/100 ml	1,519	2	0	0
Coliform Bacteria (Indicator)	C001A	0 number/100 ml	4,712	19	0	0
Colony Counts After 3 Days At 22°C (Colony Counts)	C007	No abnormal change	1,581	-n/a	0	85
Colony Counts After 48 Hours At 37°C (Colony Counts)	C013	No abnormal change	135	-n/a	0	207
Conductivity (Electrical Conductivity)	D001	2500 µS/cm	1,588	0	590	1100
Gross Alpha	F004	0.1 Bq/l	134	1	0.0127	0.09115
Gross Beta	F005	1 Bq/l	134	0	0.06505	0.3426
Hydrogen ion (pH) - Indicator (Hydrogen ion) (pH)	A006	6.5 - 9.5 pH Value	1,588	0	7.23	7.9422
Residual Disinfectant - Total	C010	No abnormal change	4,732	-n/a	0.11	1.03
Sulphate	A007	250 mg SO ₄ /l	134	1	47.35	225
Total Organic Carbon	A017	No abnormal change	134	-n/a	< 0.261	3.5
Tritium	F006	100 Bq/l	134	0	< 10	< 10.65
Totals:			18,249	24		