PCQA - Plano Controlo Qualidade da Água para Consumo Humano

1º Trimestre

Data										2-jan		15-jan		29-jan		12-fev		19-fev		26-fev		12-mar		19-mar		26-mar	
Zona Abastecimento										ZA1_TC_2014	ZA2_TC_2014	ZA1_TC_2014	ZA2_TC_2014	ZA2_TC_2014	ZA1_TC_2014	ZA2_TC_2014	ZA1_TC_2014	ZA1_TC_2014	ZA2_TC_2014	ZA1_TC_2014	ZA2_TC_2014	ZA1_TC_2014	ZA2_TC_2014	ZA1_TC_2014	ZA2_TC_2014	ZA2_TC_2014	ZA1_TC_2014
Parâmetro		Nº Análises Previstas no PCQA	% de Analises Realizadas	Unidades	Valor Paramétrico	Valor Recomendado	Valores Máximos Obtidos	Valores Mínimos Obtidos	% de Análises que cumprem a legislação	ZA1_TC_A_1A_ Pastelaria Bom Pecado	ZA_2_3_4_5_TC_4A_ Baleal Surf Camp	ZA1_TC_S_5A_ Casa Sr Joaquim A. Marques Silva	ZA_2_3_4_5_TC_10A_ Casa Srª Dª Olga Luís	ZA_2_3_4_5_TC_12A_ Lavandaria Baleia	ZA1_TC_S_6A_ Casa do Sr. Nélson Inácio	ZA_2_3_4_5_TC_15A_ Casa Sr. David Jorge Martins Brás	ZA1_TC_S_7A_ Residencial Katekero II	ZA1_TC_S_8A_Clínica Médica Dr. Vítor Moreira	ZA_2_3_4_5_TC_16A_ Mini mercado Praia Mar	ZA1_TC_S_9A_Casa Profª Ana Varela Pena	ZA_2_3_4_5_TC_18A_ Casa Sr. Rui Filipe Mil-Homens Quinta	ZA1_TC_A_1A_ Lavandaria Beane	ZA_2_3_4_5_TC_20A_ Casa do Sr. Paulo Jorge	ZA1_TC_S_5A_Pastelaria Pérola de Peniche	ZA_2_3_4_5_TC_21A_ Casa Sr. Luciano Jesus Ferreira	ZA_2_3_4_5_TC_21A_ Oficina Sr. Vítor Gaspar	ZA1_TC_S_6A_ Clínica Médica da Ajuda
CR1	Bactérias coliformes	18	100	N/100ml	0	---	0	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	E. coli	18	100	N/100 ml	0	---	0	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Cloro residual livre	18	100	mg/l	---	> 0,2 e < 0,6	1,5	0,2	100	1,5	0,4	0,4	0,5	0,4	0,2	0,4	0,3	0,2	0,3	0,2	0,4	0,2	0,4	0,3	0,2	0,2	0,3
CR2	Alumínio	9	100	µg/l Al	200	---	<50 (LQ)	<50 (LQ)	100	< 50	< 50	---	---	< 50	< 50	< 50	---	---	---	< 50	< 50	---	---	---	---	< 50	< 50
	Amónio	9	100	mg/l NH4	0,5	---	0,07	<0,03 (LQ)	100	0,1	0,06	---	---	< 0,03	< 0,03	0,07	---	---	---	0,04	< 0,03	---	---	---	---	0,04	0,03
	Cheiro	9	100	Factor de diluição	3	---	<1 (LQ)	<1 (LQ)	100	< 1	< 1	---	---	< 1	< 1	< 1	---	---	---	< 1	< 1	---	---	---	---	< 1	< 1
	Clostridium perfringens	9	100	N/100ml	0	---	0	0	100	0	0	---	---	0	0	0	---	---	---	0	0	---	---	---	---	0	0
	Condutividade	9	100	µS/cm a 20ºC	2500	---	610	160	100	610	160	---	---	250	250	230	---	---	---	320	340	---	---	---	---	210	320
	Cor	9	100	mg/l PtCo	20	---	<5 (LQ)	<5 (LQ)	100	< 5	< 5	---	---	< 5	< 5	< 5	---	---	---	< 5	< 5	---	---	---	---	< 5	< 5
	Manganês	9	100	µg/l Mn	50	---	<10 (LQ)	<5,0 (LQ)	100	< 5,0	< 5,0	---	---	< 10	< 10	< 10	---	---	---	< 10	< 10	---	---	---	---	< 10	< 10
	Nitratos	9	100	mg/l NO3	50	---	13	3,1	100	4,5	3,1	---	---	7	6	7	---	---	---	11	13	---	---	---	---	7,7	7,8
	Número total de Germes a 22ºC	9	100	UFC/ 1ml	SAA[2]	100	14	<1 (LQ)	100	6,0	14	---	---	< 1	< 1	2	---	---	---	< 1	< 1	---	---	---	---	7	< 1
	Número total de Germes a 37ºC	9	100	UFC/1 ml	SAA[2]	20	11	1	100	1,0	11	---	---	< 1	< 1	< 1	---	---	---	< 1	< 1	---	---	---	---	< 1	< 1
	pH	9	100	Unidades de pH	>=6,5 e < 9	---	8,3	7,5	100	7,5	8,3	---	---	7,9	7,8	7,9	---	---	---	7,7	7,6	---	---	---	---	7,8	7,7
	Turvação, NTU	9	100	NTU	4	---	0,5	<0,2 (LQ)	100	< 0,2	< 0,2	---	---	< 0,2	< 0,2	< 0,2	---	---	---	< 0,2	< 0,2	---	---	---	---	< 0,2	0,5
	Oxidabilidade	9	100	mg/ L	5	---	<1,5 (LQ)	<1,5 (LQ)	100	< 1,5	< 1,5	---	---	< 1,5	< 1,5	< 1,5	---	---	---	< 1,5	< 1,5	---	---	---	---	< 1,5	1,5
	Sabor	9	100	Factor de diluição	3	---	<1 (LQ)	<1 (LQ)	100	< 1	< 1	---		< 1	< 1	< 1				< 1	< 1					< 1	< 1
	1,2-dicloetano	2	100	µg/l	---	---	<1,0 (LQ)	<1,0 (LQ)	100	---	---	---	---	---	---	---	---	---	---	---	<1,0	---	---	---	---	---	< 1,0
	Acrilamida	2	100	µg/l	0,1	---	<0,10 (LQ)	<0,10 (LQ)	100	---	---	---	---	---	---	---	---	---	---	---	< 0,10	---	---	---	---	---	< 0,10
	Antimónio	2	100	µg/l Sb	5	---	<2,5 (LQ)	<2,5 (LQ)	100	---	---	---	---	---	---	---	---	---	---	---	< 2,5	---	---	---	---	---	< 2,5
	Arsénio	2	100	µg/l As	10	---	<1,0 (LQ)	<1,0 (LQ)	100	---	---	---	---	---	---	---	---	---	---	---	<1,0	---	---	---	---	---	<1,0
	Benzeno	2	100	µg/l	1	---	<1,0 (LQ)	<1,0 (LQ)	100	---	---	---	---	---	---	---	---	---	---	---	<1,0	---	---	---	---	---	<1,0
	Benzo(a)pireno	2	100	µg/l	0,01	---	<0,006 (LQ)	<0,006 (LQ)	100	---	---	---	---	---	---	---	---	---	---	---	< 0,006	---	---	---	---	---	< 0,006
	Boro	2	100	mg/l B	1	---	0,05	<0,03(LQ)	100	---	---	---	---	---	---	---	---	---	---	---	< 0,03	---	---	---	---	---	0,05
	Bromatos	2	100	µg/l BrO3	10	---	<5 (LQ)	<5 (LQ)	100	---	---	---	---	---	---	---	---	---	---	---	< 5	---	---	---	---	---	< 5
	Cádmio	2	100	µg/l Cd	5	---	<0,5 (LQ)	<0,5 (LQ)	100	---	---	---	---	---	---	---	---	---	---	---	< 0,5	---	---	---	---	---	< 0,5
	Cálcio	2	100	mg/l Ca	---	<100	49	44	100	---	---	---	---	---	---	---	---	---	---	---	49	---	---	---	---	---	44
	Chumbo	2	100	µg/l Pb	25	---	<2,0 (LQ)	<2,0 (LQ)	100	---	---	---	---	---	---	---	---	---	---	---	< 2,0	---	---	---	---	---	< 2,0
	Cianetos	2	100	µg/l CN	50	---	<10 (LQ)	<10 (LQ)	100	---	---	---	---	---	---	---	---	---	---	---	< 10	---	---	---	---	---	< 10
	Cloretos	2	100	mg/l	250	---	36	31	100	---	---	---	---	---	---	---	---	---	---	---	31	---	---	---	---	---	36
	Cobre	2	100	mg/l	2.0	---	<0,01 (LQ)	<0,01 (LQ)	100	---	---	---	---	---	---	---	---	---	---	---	< 0,01	---	---	---	---	---	< 0,01
	Carbono orgânico total (COT)	2	100	mg/l	---	SAA[2]	4,1	<1,5 (LQ)	100	---	---	---	---	---	---	---	---	---	---	---	< 1,5	---	---	---	---	---	4,1
	Crómio	2	100	µg/l Cr	50	---	<10 (LQ)	<10 (LQ)	100	---	---	---	---	---	---	---	---	---	---	---	< 10	---	---	---	---	---	< 10
	Dureza total	2	100	mg/l CaCO3	---	---	150	140	100	---	---	---	---	---	---	---	---	---	---	---	150	---	---	---	---	---	140
	Enterococos	2	100	N/100 ml	0	---	0	0	100	---	---	---	---	---	---	---	---	---	---	---	0	---	---	---	---	---	0
	Ferro	2	100	µg/l Fe	200	---	44	<10 (LQ)	100	---	---	---	---	---	---	---	---	---	---	---	44	---	---	---	---	---	<10
	Fluoretos	2	100	mg/l F	1,5	---	0,1	0,1	100	---	---	---	---	---	---	---	---	---	---	---	0,1	---	---	---	---	---	0,1

CI	Hidrocarbonetos Aromáticos Policíclicos [6] (HAP)	2	100	µg/l	0,1	---	<0,015 (LQ mais elevado)	<0,015 (LQ mais elevado)	100	---	---	---	---	---	---	---	---	---	---	---	< 0,015	---	---	---	---	---	< 0,015
	Benzo(b)fluoranteno [c]	2	100	µg/l	---	---	<0,015	<0,015	100	---	---	---	---	---	---	---	---	---	---	---	< 0,015	---	---	---	---	---	< 0,015
	Benzo(g,h,i)perileno [c]	2	100	µg/l	---	---	<0,015	<0,015	100	---	---	---	---	---	---	---	---	---	---	---	< 0,015	---	---	---	---	---	< 0,015
	Benzo(k)fluoranteno [c]	2	100	µg/l	---	---	<0,015	<0,015	100	---	---	---	---	---	---	---	---	---	---	---	< 0,015	---	---	---	---	---	< 0,015
	Indeno(1,2,3-cd)perileno [c]	2	100	µg/l	---	---	<0,015	<0,015	100	---	---	---	---	---	---	---	---	---	---	---	< 0,015	---	---	---	---	---	< 0,015
	Magnésio	2	100	mg/l	---	50	7,7	6,4	100	---	---	---	---	---	---	---	---	---	---	---	6,4	---	---	---	---	---	7,7
	Mercúrio	2	100	µg/l Hg	1	---	<0,3 (LQ)	<0,3 (LQ)	100	---	---	---	---	---	---	---	---	---	---	---	< 0,3	---	---	---	---	---	< 0,3
	Níquel	2	100	µg/l Ni	---	---	<2,0 (LQ)	<2,0 (LQ)	100	---	---	---	---	---	---	---	---	---	---	---	< 2,0	---	---	---	---	---	< 2,0
	Nitritos	2	100	mg/L NO2	0,5	---	<0,05 (LQ)	<0,05 (LQ)	100	---	---	---	---	---	---	---	---	---	---	---	< 0,05	---	---	---	---	---	< 0,05
	Pesticidas totais [5]	2	100	µg/l	0,5	---	<0,05 (LQ mais elevado)	<0,05 (LQ mais elevado)	100	---	---	---	---	---	---	---	---	---	---	---	< 0,05	---	---	---	---	---	< 0,05
	Selénio	2	100	µg/l Se	10	---	<1,0 (LQ)	<1,0 (LQ)	100	---	---	---	---	---	---	---	---	---	---	---	< 1,0	---	---	---	---	---	< 1,0
	Sódio	2	100	mg/l Na	200	---	26	26	100	---	---	---	---	---	---	---	---	---	---	---	26	---	---	---	---	---	26
	Linurão [b]	2	100	µg/l	0,1	---	<0,05 (LQ)	<0,05 (LQ)	100	---	---	---	---	---	---	---	---	---	---	---	< 0,05	---	---	---	---	---	< 0,05
	Sulfatos	2	100	mg/l SO4	250	---	48	23	100	---	---	---	---	---	---	---	---	---	---	---	23	---	---	---	---	---	48
	Terbutilazina [b]	2	100	µg/l	0,1	---	<0,05 (LQ)	<0,05 (LQ)	100	---	---	---	---	---	---	---	---	---	---	---	< 0,05	---	---	---	---	---	< 0,05
	Tetracloroeteno	2	100	µg/l	---	---	<1,0 (LQ)	<1,0 (LQ)	100	---	---	---	---	---	---	---	---	---	---	---	< 1,0	---	---	---	---	---	< 1,0
	Desetilterbutilazina [b]	2	100	µg/l	0,1	---	<0,05 (LQ)	<0,05 (LQ)	100	---	---	---	---	---	---	---	---	---	---	---	< 0,05	---	---	---	---	---	< 0,05
	Tricloroeteno	2	100	µg/l	---	---	<1,0 (LQ)	<1,0 (LQ)	100	---	---	---	---	---	---	---	---	---	---	---	< 1,0	---	---	---	---	---	< 1,0
	Trihalometanos Total [4]	2	100	µg/l	100	---	43	39	100	---	---	---	---	---	---	---	---	---	---	---	39	---	---	---	---	---	43
	Clorofórmio [a]	2	100	µg/l	---	---	18	15	100	---	---	---	---	---	---	---	---	---	---	---	15	---	---	---	---	---	18
	Bromofórmio [a]	2	100	µg/l	---	---	8	7	100	---	---	---	---	---	---	---	---	---	---	---	7	---	---	---	---	---	8
	Bromodiclorometano [a]	2	100	µg/l	---	---	8	8	100	---	---	---	---	---	---	---	---	---	---	---	8	---	---	---	---	---	8
	Dibromoclorometano [a]	2	100	µg/l	---	---	9	9	100	---	---	---	---	---	---	---	---	---	---	---	9	---	---	---	---	---	9
TOTAL		266																									

Legenda

>	Valor superior ao Limite de Quantificação	1	Valor inferior ao Limite de Detecção	4	Somatório das espécies (a)	7	Somatório das espécies (c)
<	Valor inferior ao Limite de Quantificação	2	Sem alteração anormal	5	Somatório das espécies (b)	8	Somatório das espécies (d)
Abc	Valor superior ao limite permitido por lei (valor paramétrico)	3	Parâmetros não obrigatórios	6	Somatório das 2 espécies		
Abc	Valor superior / inferior ao recomendado por lei (parâmetros indicadores)						

Metodologia de averiguação de causas relativas a incumprimentos:
Não se registaram incumprimentos.

Causas relativas a incumprimentos:
Não se registaram incumprimentos.

Medidas corretivas implementadas:
Não se registaram incumprimentos.

Observações:

Os valores a laranja referentes a Cloro Residual Livre não representam incumprimentos mas sim desvios ao valor recomendado (indicador) para o parâmetro.

O valor **superior** ao Valor Recomendado, obtido no dia 2 de janeiro na ZA1 é concordante com o valor de **1,3 mg/l CL** obtido no mesmo dia no ponto de Controlo Operacional Externo. (1A_Largo do Pocinho).

O Diretor-Delegado, Técnico Responsável

João Vilhena Raminhos Márcia Reis

Data Emissão: 23-05-2014 10:39