SMAS PENICHE

CONTROLO QUALIDADE

CRIADO EM: 11-11-08
REVISTO EM: Nov-08
VERSÃO: 1.0

PCQA - Plano Controlo Qualidade da Água para Consumo Humano

4º Trimestre

Data										6/out			13/out	20/out				3/nov			10/nov	17/nov				30/nov			15/dez				29/dez
Zona Abastecimento										ZA1_ETA S Domingos	ZA2_Olho Marinho / ALVT	ZA4_ETA S Domingos / Mistura	ZA2_Olho Marinho / ALVT	ZA1_ETA S Domingos	ZA2_Olho Marinho / ALVT	ZA3_ Ferrel	ZA4_ETA S Domingos / Mistura	ZA1_ETA S Domingos	ZA2_Olho Marinho / ALVT	ZA4_ETA S Domingos / Mistura	ZA2_Olho Marinho / ALVT	ZA1_ETA S Domingos	ZA2_Olho Marinho / ALVT	ZA3_ Ferrel	ZA4_ETA S Domingos / Mistura	ZA1_ETA S Domingos	ZA2_Olho Marinho / ALVT	ZA4_ETA S Domingos / Mistura	ZA1_ETA S Domingos	ZA2_Olho Marinho / ALVT	ZA3_ Ferrel	ZA4_ETA S Domingos / Mistura	ZA2_Olho Marinho / ALVT
Parâmetro		Nº Análises Previstas no PCQA	% de Analises Realizadas	Unidades	Valor Paramétrico	Valor Recomendado	Valores Maximos Obtidos	Valores Minimos Obtidos	% de Análises que cumprem a legislação	ZA1_TC_34A_ Pronto Gás	ZA2_TC_12A_ Villa Hostel	ZA4_TC_5A_ Casa Sr Manuel José Duarte Oliveira	ZA2_TC_18A_ Casa Sr Fernando Manuel Brito	ZA1_TC_1A_ Rasumo Salvajem - Hostel	ZA2_TC_24A_ Casa Dª Maria Amalia Gomes Estevam	ZA3_TC_4A_ Casa Dª Maria Lidia Santos Cruz	ZA4_TC_9A_ Casa Sr Avelino Medalha Rosa	ZA1_TC_3A_ KidsPoint - OTL	ZA2_TC_23A_ Casa Sr Mário Pedro	ZA4_TC_7A_ Agencia de Seguros Pedro Farto	ZA2_TC_19A_ Casa Sr Honorato Diamantino	ZA1_TC_34A_ Casa Dª Carmen Encarnação Santos	ZA2_TC_15A_ Casa Sr Carlos Correia Martins	ZA3_TC_26A_ Casa Sr Manuel Conceição Noivo	ZA4_TC_6A_ Casa Sr Alvaro Floriano Marques	ZA1_TC_2A_ EB1 nº2 _Filtro	ZA2_TC_17A_ Casa Sr Marcolino Conceição Sousa	ZA4_TC_5A_ Casa Dª Cláudia Carmo	ZA1_TC_3A_ Casa Dª Inácia de Jesus	ZA2_TC_22A_ Casa Sr. Carlos Correia	ZA3_TC_25A_ Casa Sr Flávio Alves	ZA4_TC_8A_ Casa Dª Alexandra Paula Bulhões P Bem	ZA2_TC_11A_ Casa Dª Maria de Fátima Fausto Rainha
CR1	Bacterias coliformes	24	100	UFC/ 100ml	0	—	>100	0	95,83	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	>100	2	0	0	0	0	0
	E. coli	24	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	0	0	0	0	0	0
	Cloro residual livre	24	100	mg/l	—	> 0,2 e < 0,6	0,50	0,16	100	<0,16	0,50	0,18	0,40	0,35	0,35	0,29	0,18	0,17	<0,16	0,33	0,34	<0,16	0,34	0,25	0,19	0,26	0,22	0,30	0,20	0,50	0,40	0,50	0,50
CR2	Alumínio	11	100	µg/l Al	200	—	67	<10	100	—	—	—	22	13	—	—	27	—	—	—	27	18	—	—	25	—	28	—	15	—	67	23	37
	Amónio	11	100	mg/l NH4	0,5	—	<0,05	<0,05	100	—	—	—	<0,05	<0,05	—	—	<0,05	—	—	—	<0,05	<0,05	—	—	<0,05	—	<0,05	—	<0,05	—	<0,05	<0,05	<0,05
	Cheiro	11	100	Factor de diluição	3	—	<1	<1	100	—	—	—	<1	<1	—	—	<1	—	—	—	<1	<1	—	—	<1	—	<1	—	<1	—	<1	<1	<1
	Clostridium perfringens (incluindo esporos)	11	100	N/100ml	0	—	0	0	100	—	—	—	0	0	—	—	0	—	—	—	0	0	—	—	0	—	0	—	0	—	0	0	0
	Condutividade	11	100	µS/cm a 20ºC	2500	—	716	114	100	—	—	—	447	716	—	—	499	—	—	—	379	712	—	—	432	—	309	—	653	—	157	424	263
	Cor	11	100	mg/l PtCo	20	—	<3,0	<3,0	100	—	—	—	<3,0	<3,0	—	—	<3,0	—	—	—	<3,0	<3,0	—	—	<3,0	—	<3,0	—	<3,0	—	<3,0	<3,0	<3,0
	Manganês	11	100	µg/l Mn	50	—	3,1	<2,0	100	—	—	—	<2,0	<2,0	—	—	3,1	—	—	—	<2,0	3,1	—	—	<2,0	—	<2,0	—	<2,0	—	<2,0	<2,0	<2,0
	Nitratos	11	100	mg/l NO3	50	—	27,9	<3,0	100	—	—	—	16,9	<3,0	—	—	8,3	—	—	—	7,6	10,7	—	—	11,9	—	27,9	—	3,8	—	3	8,5	8,6
	Número total de Germes a 22ºC	11	100	UFC/ 1ml	SAA	100	227	0	100	—	—	—	227	0	—	—	0	—	—	—	0	0	—	—	0	—	0	—	74	—	28	2	3
	Número total de Germes a 37ºC	11	100	UFC/ 1 ml	SAA	20	>300	0	100	—	—	—	>300	0	—	—	3	—	—	—	0	0	—	—	0	—	0	—	19	—	31	0	0
	pH	11	100	Unidades de pH	>=6,5 e < 9	—	8,3	7,1	100	—	—	—	7,7	7,1	—	—	7,4	—	—	—	7,3	7,9	—	—	7,8	—	8	—	7,6	—	8,3	7,9	7,9
	Turvação	11	100	NTU	4	—	1,7	<1,0	100	—	—	—	<1,0	<1,0	—	—	<1,0	—	—	—	<1,0	<1,0	—	—	1,7	—	<1,0	—	<1,0	—	<1,0	<1,0	<1,0
	Oxidabilidade	11	100	mg/ L	5	—	2,4	<1,0	100	—	—	—	1,4	2,3	—	—	2	—	—	—	<1,0	2,4	—	—	1,5	—	<1,0	—	2,3	—	1,1	1,3	1,1
	Sabor	11	100	Factor de diluição	3	—	<1	<1	100	—	—	—	<1	<1	—	—	<1	—	—	—	<1	<1	—	—	<1	—	<1	—	<1	—	<1	<1	<1
	1,2-dicloroetano	3	100	µg/l	—	—	<0,25	<0,25	100	—	—	—	<0,25	—	—	—	—	—	—	—	—	<0,25	—	—	<0,25	—	—	—	—	—	—	—	—
	Acrilamida	3	100	µg/l	0,1	—	<0,050	<0,050	100	—	—	—	<0,050	—	—	—	—	—	—	—	—	<0,050	—	—	<0,050	—	—	—	—	—	—	—	—
	Antimónio	3	100	µg/l Sb	5	—	<4	<4	100	—	—	—	<4	—	—	—	—	—	—	—	—	<4	—	—	<4	—	—	—	—	—	—	—	—
	Arsénio	3	100	µg/l As	10	—	<3,0	<3,0	100	—	—	—	<3,0	—	—	—	—	—	—	—	—	<3,0	—	—	<3,0	—	—	—	—	—	—	—	—
	Benzeno	3	100	µg/l	1	—	<0,26	<0,26	100	—	—	—	<0,26	—	—	—	—	—	—	—	—	<0,26	—	—	<0,26	—	—	—	—	—	—	—	—
	Benzo(a)pireno	3	100	µg/l	0,01	—	<0,005	<0,005	100	—	—	—	<0,005	—	—	—	—	—	—	—	—	<0,005	—	—	<0,005	—	—	—	—	—	—	—	—
	Boro	3	100	mg/l B	1	—	<0,10	<0,10	100	—	—	—	<0,10	—	—	—	—	—	—	—	—	<0,10	—	—	<0,10	—	—	—	—	—	—	—	—
	Bromatos	3	100	µg/l BrO3	10	—	<5	<5	100	—	—	—	<5	—	—	—	—	—	—	—	—	<5	—	—	<5	—	—	—	—	—	—	—	—
	Bromodiclorometano	3	100	µg/l	—	—	16	1,2	100	—	—	—	13	—	—	—	—	—	—	—	—	12	—	—	16	—	—	—	—	—	—	—	—
	Bromofórmio	3	100	µg/l	—	—	24	<0,5	100	—	—	—	8,4	—	—	—	—	—	—	—	—	24	—	—	11	—	—	—	—	—	—	—	—
	Cádmio	3	100	µg/l Cd	5	—	<1,0	<1,0	100	—	—	—	<1,0	—	—	—	—	—	—	—	—	<1,0	—	—	<1,0	—	—	—	—	—	—	—	—
	Cálcio	3	100	mg/l Ca	—	<100	19,5	13,9	100	—	—	—	14,6	—	—	—	—	—	—	—	—	19,5	—	—	13,9	—	—	—	—	—	—	—	—
	Carbono orgânico total (COT)	3	100	mg/l	—	SAA	2,4	<1	100	—	—	—	<1	—	—	—	—	—	—	—	—	2,4	—	—	2	—	—	—	—	—	—	—	—
	Chumbo	3	100	µg/l Pb	25	—	<7	<7	100	—	—	—	<7	—	—	—	—	—	—	—	—	<7	—	—	<7	—	—	—	—	—	—	—	—
	Cianetos	3	100	µg/l CN	50	—	<20	<20	100	—	—	—	<20	—	—	—	—	—	—	—	—	<20	—	—	<20	—	—	—	—	—	—	—	—
	Cloretos	3	100	mg/l	250	—	39	20	100	—	—	—	39	—	—	—	—	—	—	—	—	20	—	—	30	—	—	—	—	—	—	—	—
	Clorofórmio	3	100	µg/l	—	—	20	1,8	100	—	—	—	20	—	—	—	—	—	—	—	—	1,8	—	—	16	—	—	—	—	—	—	—	—
	Cobre	3	100	mg/l	2,0	—	0,010	0,0033	100	—	—	—	0,010	—	—	—	—	—	—	—	—	0,0033	—	—	0,0051	—	—	—	—	—	—	—	—
	Crómio	3	100	µg/l Cr	50	—	<5	<5	100	—	—	—	<5	—	—	—	—	—	—	—	—	<5	—	—	<5	—	—	—	—	—	—	—	—
	Dibromoclorometano	3	100	µg/l	—	—	30	13	100	—	—	—	13	—	—	—	—	—	—	—	—	30	—	—	13	—	—	—	—	—	—	—	—
	Dureza total	3	100	mg/l CaCO3	—	—	117	94	100	—	—	—	117	—	—	—	—	—	—	—	—	94	—	—	97	—	—	—	—	—	—	—	—
	Enterococos	3	100	N/100 ml	0	—	0	0	100	—	—	—	0	—	—	—	—	—	—	—	—	0	—	—	0	—	—	—	—	—	—	—	—
	Ferro	3	100	µg/l Fe	200	—	140	<10	100	—	—	—	<10	—	—	—	—	—	—	—	—	140	—	—	140	—	—	—	—	—	—	—	—
	Fluoretos	3	100	mg/l F	1,5	—	0,14	<0,10	100	—	—	—	0,14	—	—	—	—	—	—	—	—	<0,10	—	—	<0,10	—	—	—	—	—	—	—	—
CI	Hidrocarbonetos Aromáticos Policíclicos (HAP)	3	100	µg/l	0,1	—	<0,025	<0,025	100	—	—	—	<0,025	—	—	—	—	—	—	—	—	<0,025	—	—	<0,025	—	—	—	—	—	—	—	—

Magnésio	3	100	mg/l	---	50	4,20	2,04	100	---	---	---	2,04	---	---	---	---	---	---	---	---	4,11	---	---	4,20	---	---	---	---	---	---	---	---
Mercúrio	3	100	µg/l Hg	1	---	<0,3	<0,3	100	---	---	---	<0,3	---	---	---	---	---	---	---	---	<0,3	---	---	<0,3	---	---	---	---	---	---	---	---
Níquel	3	100	µg/l Ni	---	---	<6	<6	100	---	---	---	<6	---	---	---	---	---	---	---	---	<6	---	---	<6	---	---	---	---	---	---	---	---
Nitritos	3	100	mg/L NO2	0,5	---	<0,01	<0,01	100	---	---	---	<0,05	---	---	---	---	---	---	---	---	<0,05	---	---	<0.05	---	---	---	---	---	---	---	---
Selénio	3	100	µg/l Se	10	---	<3	<3	100	---	---	---	<3	---	---	---	---	---	---	---	---	<3	---	---	<3	---	---	---	---	---	---	---	---
Sódio	3	100	mg/l Na	200	---	20,7	11,8	100	---	---	---	11,8	---	---	---	---	---	---	---	---	20,7	---	---	20,7	---	---	---	---	---	---	---	---
Sulfatos	3	100	mg/l SO4	250	---	30	11	100	---	---	---	30	---	---	---	---	---	---	---	---	20	---	---	21	---	---	---	---	---	---	---	---
Tetracloroeteno	3	100	µg/l	---	---	<0,5	<0,5	100	---	---	---	<0,5	---	---	---	---	---	---	---	---	<0,5	---	---	<0,5	---	---	---	---	---	---	---	---
Tricloroeteno	3	100	µg/l	---	---	<0,5	<0,5	100	---	---	---	<0,5	---	---	---	---	---	---	---	---	<0,5	---	---	<0,5	---	---	---	---	---	---	---	---
Trihalometanos Total	3	100	µg/l	100	---	68	54	100	---	---	---	54	---	---	---	---	---	---	---	---	68	---	---	56	---	---	---	---	---	---	---	---
Alfa total	3	100	Bq/L	0,1 Bq/L	---	<0,04	<0,04	100	---	---	---	<0,04	---	---	---	---	---	---	---	---	<0,04	---	---	<0,04	---	---	---	---	---	---	---	---
Beta total	3	100	Bq/L	1 Bq/L	---	0,27	<0,10	100	---	---	---	<0,10	---	---	---	---	---	---	---	---	0,27	---	---	0,12	---	---	---	---	---	---	---	---
Dose Indicativa total	3	100	mSv/ano	0,1 mSv/a	---	<0,03	<0,03	100	---	---	---	<0,1	---	---	---	---	---	---	---	---	<0,1	---	---	<0,1	---	---	---	---	---	---	---	---
Radão	3	100	Bq/L	500 Bq/L	---	<5,8	<5,8	100	---	---	---	<10,0	---	---	---	---	---	---	---	---	<10	---	---	<10,0	---	---	---	---	---	---	---	---
Diurão	2	100	µg/l	0,1	---	<0,08	<0,08	100	---	---	---	<0,08	---	---	---	---	---	---	---	---	---	---	---	<0,08	---	---	---	---	---	---	---	---
Linurão	2	100	µg/l	0,1	---	<0,08	<0,08	100	---	---	---	<0,08	---	---	---	---	---	---	---	---	---	---	---	<0,08	---	---	---	---	---	---	---	---
Terbutilazina	2	100	µg/l	0,1	---	<0,08	<0,08	100	---	---	---	<0,08	---	---	---	---	---	---	---	---	---	---	---	<0,08	---	---	---	---	---	---	---	---
Desetilterbutilazina	2	100	µg/l	0,1	---	<0,08	<0,08	100	---	---	---	<0,08	---	---	---	---	---	---	---	---	---	---	---	<0,08	---	---	---	---	---	---	---	---
Tebucozanol	1	100	µg/l	0,1	---	<0,025	<0,025	100	---	---	---	---	---	---	---	---	---	---	---	---	<0,025	---	---	---	---	---	---	---	---	---	---	---
Benzo(b)fluoranteno	3	100	µg/l	---	---	<0,005	<0,005	100	---	---	---	<0,005	---	---	---	---	---	---	---	---	<0,005	---	---	<0,005	---	---	---	---	---	---	---	---
Benzo(g,h,i)perileno	3	100	µg/l	---	---	<0,005	<0,005	100	---	---	---	<0,005	---	---	---	---	---	---	---	---	<0,005	---	---	<0,005	---	---	---	---	---	---	---	---
Benzo(k)fluoranteno	3	100	µg/l	---	---	<0,005	<0,005	100	---	---	---	<0,005	---	---	---	---	---	---	---	---	<0,005	---	---	<0,005	---	---	---	---	---	---	---	---
Indeno(1,2,3-cd)pireno	3	100	µg/l	---	---	<0,010	<0,010	100	---	---	---	<0,010	---	---	---	---	---	---	---	---	<0,010	---	---	<0,010	---	---	---	---	---	---	---	---
Pesticidas totais	3	100	µg/l	0,5	---	<0,0225	<0,0225	100	---	---	---	<0,08	---	---	---	---	---	---	---	---	<0,025	---	---	<0,08	---	---	---	---	---	---	---	---
TOTAL	367																															

Legenda

> Valor superior ao Limite de Quantificação
< Valor inferior ao Limite de Quantificação
Abc Valor superior ao limite permitido por lei (valor paramétrico)
Abc Valor superior / inferior ao recomendado por lei (parâmetros indicadores)

Metodologia de averiguação de causas relativas a incumprimentos:

Realização de análises de verificação.

Causas relativas a incumprimentos:

F_ Não foram identificadas (nomenclatura ERSAR)

Medidas corretivas implementadas:

N4_ Não foram tomadas medidas porque as análises posteriores não confirmaram o incumprimento (nomenclaura ERSAR)

N1_ Não foram tomadas medidas por não haver risco para a saúde (parecer da AS ou ausência de parecer (nomenclatura ERSAR)

Observações:
Os valores a laranja, referentes ao parâmetro Cloro Residual Livre, não constituem incumprimentos mas sim desvios (inferior ou superior) ao valor recomendado pelo DL 306/2007, de 27 de agosto.

06/10/2016 O resultado do parâmetro Cloro Residual Livre, inferior ao recomendado, obtido na Zona de Abastecimento 1, não é confirmado pelo valor de **0,7 mg/L Cl,** obtido na mesma data, no ponto de Controlo Operacional, na Rede de Abastecimento, 34A_Mercado Municipal. O valor inferior ao recomendado, obtido na Zona de Abastecimento 4, também não é corroborado pelo resultado de **0,25 mg/L Cl,** obtido na rede de abastecimento correspondente, 5A_S.Marcos.

20/10/2016 O resultado **<0,16 mg/L Cl,** obtido no ponto de Controlo Operacional da Zona de Abastecimento 4, 9A_ETAR de Peniche, corrobora o valor inferior ao recomendado, obtido na mesma data na torneira do consumidor da respetiva Zona de Abastecimento.
03/11/2016 Os valores inferiores ao recomendado, obtidos nas Zonas de Abastecimento 1 e 2, não são concordantes com os resultados de 0,5 mg/L Cl e **0,27 mg/L Cl,** obtidos na mesma data, nos pontos de controlo operacional das respetivas Redes de Abastecimento.
17/11/2016 Os valores inferiores ao recomendado não se confirmam pelos valores obtidos nas correspondentes redes de abastecimento, cujos resultados, nos pontos de controlo operacional, na mesma data foram respetivamente **0,5 mg/L Cl** (34A_Mercado Municipal) e **0,24 mg/L Cl** (6A_Remédios).

Os valores a laranja referentes a Nº total de Germes a 22ºC e Nº total de Germes a 37 ºC, não constituem incumprimentos mas sim desvios aos valores máximos recomendados pelo DL 306/2007, de 27 de agosto.

Observações relativas a incumprimentos:

Para avaliação dos incumprimentos ao parâmetro Bactérias coliformes, registados em 30 de novembro, foram realizadas análises de verificação, em 9 de dezembro, nas torneiras de consumidor onde os mesmos foram registados, bem como nos pontos de controlo operacional das redes de abastecimento correspondentes - ZA2_REDE_17A_Casal Moinho e ZA4_REDE_5A_S. Marcos - e ainda, em torneiras de consumidor localizadas geograficamente próximas dos locais onde os incumprimentos foram registados.

Em ambos os casos, as referidas análises de verificação **não confirmaram** a persistência do incumprimento.

Data Emissão: 15/02/2017 12:02

O Presidente do Conselho de Administração,
António José Ferreira Sousa Correia Santos (Dr.)

Técnico Responsável
Márcia Reis