Environmental Protection

The Solway Tweed River Basin District (Standards) (Scotland) Amendment (No. 2) Directions 2015

September 2015

The Scottish Government
Riaghaltas na h-Alba

ENVIRONMENTAL PROTECTION

The Solway Tweed River Basin District (Standards) (Scotland) Amendment (No. 2) Directions 2015

Made - - - - 10th September 2015

Coming into force in accordance with article 1(2) to (4)

The Scottish Ministers give the following Directions to SEPA in exercise of the powers conferred by section 40(1) and (2) of the Environment Act 1995(**a**), section 2(6) of the Water Environment and Water Services (Scotland) Act 2003(**b**) and of all other powers enabling them to do so.

In accordance with section 40(6) of the Environment Act 1995, they have consulted SEPA.

Citation, commencement, extent and application

1.—(1) These Directions may be cited as the Solway Tweed River Basin District (Standards) (Scotland) Amendment (No. 2) Directions 2015.

(2) Subject to paragraphs (3) and (4), these Directions come into force on 14th September 2015.

(3) Article 4(f) comes into force on 22nd December 2018.

(4) Article 6 comes into force on 13th September 2015.

(5) These Directions extend to Scotland only.

(6) In these Directions—

(a) a reference to the 2014 Directions is a reference to the Solway Tweed River Basin District (Standards) Directions 2014(**c**); and

(b) a reference to a numbered article is a reference to the paragraph so numbered (other than in a Schedule).

Amendment of article 1(3) (application)

2. In article 1(3)(c) of the 2014 Directions, for "the Directive" substitute "the Water Framework Directive, the Priority Substances Directive".

Amendment of article 2 (interpretation)

3. In article 2 of the 2014 Directions—

(a) in paragraph (1), for the definition of "the Directive" substitute—

""the Water Framework Directive" means Directive 2000/60/EC of the European Parliament and of the Council establishing a framework for Community action in the field of water policy(**a**) as last amended by Commission Directive 2014/101/EU(**b**);";

(**a**) 1995 c. 25. The functions of the Secretary of State were transferred to the Scottish Ministers by virtue of section 53 of the Scotland Act 1998 (c. 46).
(**b**) 2003 asp 3.
(**c**) The 2014 Directions were made on 14th August 2014 and came into force on 16th August 2014.

(b) in paragraph (1), for the definition of "the Groundwater Directive" substitute—

""the Groundwater Directive" means Directive 2006/118/EC of the European Parliament and of the Council on the protection of groundwater against pollution and deterioration(**c**) as amended by Commission Directive 2014/80/EU(**d**);

"the Priority Substances Directive" means Directive 2008/105/EC of the European Parliament and of the Council on environmental quality standards in the field of water policy(**e**) as amended by Directive 2013/39/EU(**f**);"; and

(c) in paragraph (5), for "the Directive", in both places it occurs, substitute "the Water Framework Directive".

Amendment of Schedule 2 (environmental standards)

4. In Part C of Schedule 2 to the 2014 Directions—

(a) in Tables C1.1, C1.3, C3.1, C3.2 and C4.1, for "*values*" substitute "*standards*";

(b) in paragraph 2(3), for "the Directive" substitute "the Water Framework Directive";

(c) in Table C3.2, in column 2, for "*standards*" substitute "*concentration*";

(d) in Table C4.5, after "*Annual mean*" insert "*concentration of un-ionised ammonia*";

(e) in Table C4.9, after "Annual mean", in both places it occurs, insert "concentration of dissolved arsenic";

(f) omit Table C4.18 (environmental standards for cypermethrin)(**g**);

(g) after Table C4.31 insert—

"**Table C4.31A: Environmental standards for triclosan**			
All rivers and freshwater lochs		*All transitional waters and coastal waters*	
Good		*Good*	
Column 1	*Column 2*	*Column 3*	*Column 4*
Annual mean (µg/l)	95-percentile (µg/l)	Annual mean (µg/l)	95-percentile (µg/l)
0.1	0.28	0.1	0.28"

;

(h) in note (i) to Table C4.32, after "*thereof or in*" insert "*the*";

(i) in note (ii) to Table C4.32, for "*mg/l*" substitute "*µg/l*"; and

(j) in Part C, for paragraph 5 (environmental standards for priority substances etc.), together with Table C5.1 and the notes to that table, substitute—

"**5.**—(1) SEPA must apply the environmental quality standards in Table C5.1 (as read with the notes to that Table) in accordance with article 5 of the Cross-Border River Basin Districts (Scotland) Directions 2015(**h**).

(2) For the purposes of sub-paragraph (1)—

(a) the achievement of an AA-EQS for a substance in a body of surface water means that, for each representative monitoring point within the body, the arithmetic mean

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(**a**) OJ L 327, 22.12.2000, p.1, as amended by Decision No 2455/2001/EC (OJ L 331, 15.12.2001, p.1), Directive 2008/32/EC (OJ L 81, 20.3.2008, p.60), Directive 2008/105/EC (OJ L 348, 24.12.2008, p.84), Directive 2009/31/EC (OJ L 140, 5.6.2009, p.114), Directive 2013/39/EU (OJ L 226, 24.8.2013, p.1) and Commission Directive 2014/101/EU (OJ L 311, 31.10.2014, p.32).

(**b**) OJ L 311, 31.10.2014, p.32.

(**c**) OJ L 372, 27.12.2006, p.19.

(**d**) OJ L 182, 21.6.2014, p.52.

(**e**) OJ L 348, 24.12.2008, p.84.

(**f**) OJ L 226, 24.8.2013, p.1.

(**g**) This amendment does not come into force until 22nd December 2018. With effect from that date, the environmental quality standards in Table C4.18 will, in effect, be replaced by the environmental quality standards for cypermethrin in Table C5.1 (as read with the notes to that Table) in Part C of Schedule 2 to the 2014 Directions as amended by these Directions.

(**h**) These Directions came into force on 14th September 2015.

of the concentrations of that substance measured at different times during the year does not exceed the standard; and

(b) the achievement of a MAC-EQS for a substance in a body of surface water means that the measured concentration of the substance at any representative monitoring point within the body does not exceed the standard.

(3) Pursuant to sub-paragraph (2)(a), SEPA must ensure that—

(a) the calculation of the arithmetic mean;

(b) the analytical method used; and

(c) where there is no appropriate analytical method meeting the minimum performance criteria, the method of applying an EQS in Table C5.1,

are each in accordance with the technical specifications for chemical monitoring and quality of analytical results adopted under the Water Framework Directive.

(4) To ensure an acceptable level of confidence and precision for determining compliance with a MAC-EQS, SEPA may introduce statistical methods (such as percentile calculations) which comply with detailed rules laid down under the Priority Substances Directive.

(5) SEPA may, when assessing monitoring results against an EQS, take into account—

(a) natural background concentrations for metals and their compounds where such concentrations prevent compliance with the relevant EQS; and

(b) hardness, pH, dissolved organic carbon or other water quality parameters that affect the bioavailability of metals, the bioavailable concentrations being determined using appropriate bioavailability modelling.

(6) In this paragraph and in Table C5.1—

"AA-EQS" means an EQS as an annual mean;

"EQS" means an environmental quality standard in Table C5.1;

"MAC-EQS" means an EQS as a maximum allowable concentration; and

"n/a" means not applicable.

Table C5.1: Environmental quality standards for priority substances and other pollutants

No.	*Name of substance*	*Chemical abstracts service number*	*Inland water (except groundwater)*[i]		*Transitional water and coastal water*[i]		*Biota*[ii]
			Good		*Good*		*Good*
			AA-EQS[iii] *(µg/l)*	*MAC-EQS*[iv] *(µg/l)*	*AA-EQS*[iii] *(µg/l)*	*MAC-EQS*[iv] *(µg/l)*	*EQS (ug/kg wet weight)*
1	Alachlor	15972-60-8	0.3	0.7	0.3	0.7	
2	Anthracene	120-12-7	0.1	0.1	0.1	0.1	
3	Atrazine	1912-24-9	0.6	2.0	0.6	2.0	
4	Benzene	71-43-2	10	50	8	50	
5	Brominated diphenylethers[v]	32534-81-9		0.14		0.014	0.0085
6	Cadmium and its compounds (depending on water hardness classes)[vi]	7440-43-9	≤ 0.08 (Class 1) 0.08 (Class 2) 0.09 (Class 3) 0.15 (Class 4) 0.25 (Class 5)	≤ 0.45 (Class 1) 0.45 (Class 2) 0.6 (Class 3) 0.9 (Class 4) 1.5 (Class 5)	0.2	≤ 0.45 (Class 1) 0.45 (Class 2) 0.6 (Class 3) 0.9 (Class 4) 1.5 (Class 5)	

6a	Carbon-tetrachloride[vii]	56-23-5	12	n/a	12	n/a	
7	C10-13 Chloroalkanes [viii]	85535-84-8	0.4	1.4	0.4	1.4	
8	Chlorfenvinphos	470-90-6	0.1	0.3	0.1	0.3	
9	Chlorpyrifos (Chlorpyrifos-ethyl)	2921-88-2	0.03	0.1	0.03	0.1	
9a	Cyclodiene pesticides: Aldrin[vii] Dieldrin [vii] Endrin[vii] Isodrin[vii]	309-00-2 60-57-1 72-20-8 465-73-6	Σ = 0.01	n/a	Σ = 0.005	n/a	
9b	DDT total[vii][ix]	n/a	0.025	n/a	0.025	n/a	
	para-para-DDT[vii]	50-29-3	0.01	n/a	0.01	n/a	
10	1,2-Dichloroethane	107-06-2	10	n/a	10	n/a	
11	Dichloromethane	75-09-2	20	n/a	20	n/a	
12	Di(2-ethylhexyl)-phthalate (DEHP)	117-81-7	1.3	n/a	1.3	n/a	
13	Diuron	330-54-1	0.2	1.8	0.2	1.8	
14	Endosulfan	115-29-7	0.005	0.01	0.0005	0.004	
15	Fluoranthene	206-44-0	0.0063	0.12	0.0063	0.12	30
16	Hexachloro-benzene	118-74-1		0.05		0.05	10
17	Hexachloro-butadiene	87-68-3		0.6		0.6	55
18	Hexachloro-cyclohexane	608-73-1	0.02	0.04	0.002	0.02	
19	Isoproturon	34123-59-6	0.3	1.0	0.3	1.0	
20	Lead and its compounds	7439-92-1	1.2[x]	14	1.3	14	
21	Mercury and its compounds	7439-97-6		0.07		0.07	20
22	Naphthalene	91-20-3	2	130	2	130	
23	Nickel and its compounds	7440-02-0	4[x]	34	8.6	34	
24	Nonylphenols (4-Nonylphenol)	84852-15-3	0.3	2.0	0.3	2.0	
25	Octylphenols ((4-(1,1′,3,3′-tetramethylbutyl) -phenol))	140-66-9	0.1	n/a	0.01	n/a	
26	Pentachloro-benzene	608-93-5	0.007	n/a	0.0007	n/a	
27	Pentachloro-phenol	87-86-5	0.4	1	0.4	1	
28	Polyaromatic hydrocarbons (PAH)[xi]	n/a	n/a	n/a	n/a	n/a	

	Benzo(a)pyrene	50-32-8	1.7×10^{-4}	0.27	1.7×10^{-4}	0.027	5
	Benzo(b)fluor-anthene	205-99-2	(xi)	0.017	(xi)	0.017	(xi)
	Benzo(k)fluor-anthene	207-08-9	(xi)	0.017	(xi)	0.017	(xi)
	Benzo(g,h,i)-perylene	191-24-2	(xi)	$8,2 \times 10^{-3}$	(xi)	$8,2 \times 10^{-4}$	(xi)
	Indeno(1,2,3-cd)-pyrene	193-39-5	(xi)	n/a	(xi)	n/a	(xi)
29	Simazine	122-34-9	1	4	1	4	
29a	Tetrachloro-ethylene(vii)	127-18-4	10	n/a	10	n/a	
29b	Trichloro-ethylene(vii)	79-01-6	10	n/a	10	n/a	
30	Tributyltin compounds (Tributyltin-cation)	36643-28-4	0.0002	0.0015	0.0002	0.0015	
31	Trichloro-benzenes	12002-48-1	0.4	n/a	0.4	n/a	
32	Trichloro-methane	67-66-3	2.5	n/a	2.5	n/a	
33	Trifluralin	1582-09-8	0.03	n/a	0.03	n/a	
34	Dicofol	115-32-2	1.3×10^{-3}	n/a	3.2×10^{-5}	n/a	33
35	Perfluorooctane sulfonic acid and its derivatives (PFOS)	1763-23-1	6.5×10^{-4}	36	1.3×10^{-4}	7.2	9.1
36	Quinoxyfen	124495-18-7	0.15	2.7	0.015	0.54	
37	Dioxins and dioxin-like compounds	(xii)		n/a		n/a	Sum of PCDD+ PCDF+ PCB-DL 0.0065 µg/kg TEQ(xiii)
38	Aclonifen	74070-46-5	0.12	0.12	0.012	0.012	
39	Bifenox	42576-02-3	0.012	0.04	0.0012	0.004	
40	Cybutryne	28159-98-0	0.0025	0.016	0.0025	0.016	
41	Cypermethrin	52315-07-8	8×10^{-5}	6×10^{-4}	8×10^{-6}	6×10^{-5}	
42	Dichlorvos	62-73-7	6×10^{-4}	7×10^{-4}	6×10^{-5}	7×10^{-5}	
43	Hexabromocyclo dodecane (HBCDD)	(xiv)	0.0016	0.5	0.0008	0.05	167
44	Heptachlor and heptachlor epoxide	76-44-8 / 1024-57-3	2×10^{-7}	3×10^{-4}	1×10^{-8}	3×10^{-5}	6.7×10^{-3}
45	Terbutryn	886-50-0	0.065	0.34	0.0065	0.034	

Notes—

(i) Each EQS is to be construed as the total concentration of the substance in the whole water

sample, except those for cadmium, lead, mercury and nickel which are to be construed instead as the dissolved concentration (i.e. the dissolved phase of a water sample obtained by filtration through a 0.45µm filter or any equivalent pre-treatment) or, where indicated, the bioavailable concentration.

(ii) Except where otherwise indicated, biota EQS relate to fish. An alternative biota taxon, or another matrix, may be monitored if the EQS applied provides an equivalent level of protection. For substances No. 15 (fluoranthene) and No. 28 (PAHs), the biota EQS refers to crustaceans and molluscs. For the purpose of assessing chemical status, monitoring of fluoranthene and PAHs in fish is not appropriate. For substance No. 37 (dioxins and dioxin-like compounds), the biota EQS relates to fish, crustaceans and molluscs.

(iii) Unless otherwise specified, AA-EQS apply to the total concentration of all isomers.

(iv) Where the MAC-EQS is marked as 'n/a', the AA-EQS values are to be considered protective against short-term pollution peaks in continuous discharges since they are significantly lower than the values derived on the basis of acute toxicity.

(v) For the group of priority substances covered by brominated diphenylethers (No 5), the EQS refers to the sum of the concentrations of congener numbers 28, 47, 99, 100, 153 and 154.

(vi) For cadmium and its compounds (No. 6) the EQS values vary depending on the hardness of the water as specified in five class categories (Class 1: <40 mg $CaCO_3$/l, Class 2: 40 to <50 mg $CaCO_3$/l, Class 3: 50 to <100 mg $CaCO_3$/l, Class 4: 100 to <200 mg $CaCO_3$/l and Class 5: ≥200 mg $CaCO_3$/l).

(vii) This substance is not a priority substance but one of the other pollutants for which the EQS are identical to those laid down in the legislation that applied prior to 13 January 2009.

(viii) No indicative parameter is provided for this group of substances. The indicative parameter(s) must be defined through the analytical method.

(ix) DDT total comprises the sum of the isomers 1,1,1-trichloro-2,2 bis (p-chlorophenyl) ethane (CAS number 50-29-3; EU number 200- 024-3); 1,1,1-trichloro-2 (o-chlorophenyl)-2-(p-chlorophenyl) ethane (CAS number 789-02-6; EU Number 212-332-5); 1,1-dichloro- 2,2 bis (p-chlorophenyl) ethylene (CAS number 72-55-9; EU Number 200-784-6); and 1,1-dichloro-2,2 bis (p-chlorophenyl) ethane (CAS number 72-54-8; EU Number 200-783-0).

(x) These EQS refer to bioavailable concentrations of the substances.

(xi) For the group of priority substances of polyaromatic hydrocarbons (PAH) (No 28), the biota EQS and corresponding AA-EQS in water refer to the concentration of benzo(a)pyrene, on the toxicity of which they are based. Benzo(a)pyrene can be considered as a marker for the other PAHs, hence only benzo(a)pyrene needs to be monitored for comparison with the biota EQS or the corresponding AA-EQS in water.

(xii) This refers to the following compounds:

7 polychlorinated dibenzo-p-dioxins (PCDDs): 2,3,7,8-T4CDD (CAS 1746-01-6), 1,2,3,7,8-P5CDD (CAS 40321-76-4), 1,2,3,4,7,8- H6CDD (CAS 39227-28-6), 1,2,3,6,7,8-H6CDD (CAS 57653-85-7), 1,2,3,7,8,9-H6CDD (CAS 19408-74-3), 1,2,3,4,6,7,8-H7CDD (CAS 35822-46-9), 1,2,3,4,6,7,8,9-O8CDD (CAS 3268-87-9)

10 polychlorinated dibenzofurans (PCDFs): 2,3,7,8-T4CDF (CAS 51207-31-9), 1,2,3,7,8-P5CDF (CAS 57117-41-6), 2,3,4,7,8- P5CDF (CAS 57117-31-4), 1,2,3,4,7,8-H6CDF (CAS 70648-26-9), 1,2,3,6,7,8-H6CDF (CAS 57117-44-9), 1,2,3,7,8,9-H6CDF (CAS 72918-21-9), 2,3,4,6,7,8-H6CDF (CAS 60851-34-5), 1,2,3,4,6,7,8-H7CDF (CAS 67562-39-4), 1,2,3,4,7,8,9-H7CDF (CAS 55673-89-7), 1,2,3,4,6,7,8,9-O8CDF (CAS 39001-02-0)

12 dioxin-like polychlorinated biphenyls (PCB-DL): 3,3',4,4'-T4CB (PCB 77, CAS 32598-13-3), 3,3',4',5-T4CB (PCB 81, CAS 70362-50-4), 2,3,3',4,4'-P5CB (PCB 105, CAS 32598-14-4), 2,3,4,4',5-P5CB (PCB 114, CAS 74472-37-0), 2,3',4,4',5-P5CB (PCB 118, CAS 31508-00-6), 2,3',4,4',5'-P5CB (PCB 123, CAS 65510-44-3), 3,3',4,4',5-P5CB (PCB 126, CAS 57465-28-8), 2,3,3',4,4',5- H6CB (PCB 156, CAS 38380-08-4), 2,3,3',4,4',5'-H6CB (PCB 157, CAS 69782-90-7), 2,3',4,4',5,5'-H6CB (PCB 167, CAS 52663- 72-6), 3,3',4,4',5,5'-H6CB (PCB 169, CAS 32774-16-6), 2,3,3',4,4',5,5'-H7CB (PCB 189, CAS 39635-31-9).

(xiii) PCDD: polychlorinated dibenzo-p-dioxins; PCDF: polychlorinated dibenzofurans; PCB-DL: dioxin-like polychlorinated biphenyls; TEQ: toxic equivalents according to the World Health Organisation 2005 Toxic Equivalence Factors.

(xiv) This refers to 1,3,5,7,9,11-Hexabromocyclododecane (CAS 25637-99-4), 1,2,5,6,9,10-Hexabromocyclododecane (CAS 3194-55-6), α-Hexabromocyclododecane (CAS 134237-50-

6), β-Hexabromocyclododecane (CAS 134237-51-7) and γ-Hexabromocyclododecane (CAS 134237-52-8)."

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Amendment of Schedule 7 (interpretation of Schedules 1 to 6)

5. In paragraph 1 of Schedule 7 to the 2014 Directions, in the definitions of "good", "high", "moderate" and "poor", for "the Directive" in each place it occurs substitute "the Water Framework Directive".

Revocation

6. The Solway Tweed River Basin District (Standards) (Scotland) Amendment Directions 2015 are revoked(**a**).

W GEORGE BURGESS
A member of the staff of the Scottish Ministers

Victoria Quay,
Edinburgh
10th September 2015

(**a**) These are the Directions which were signed on 25th August 2015 and were due to come into force on 14th September 2015.

EXPLANATORY NOTE

(This note is not part of the Directions)

These Directions amend the Solway Tweed River Basin District (Standards) Directions 2014 ("the principal Directions") to update the environmental quality standards for priority substances and other pollutants that SEPA are directed to apply in relation to bodies of surface water (or the parts of such bodies) within the Scottish part of the Solway Tweed River Basin District and to update references to the following Directives. The principle Directions, as amended by these Directions, supplement the measures needed to comply with—

- Directive 2008/105/EC of the European Parliament and of the Council on environmental quality standards in the field of water policy(**a**) as amended by Directive 2013/39/EU(**b**);
- Directive 2006/118/EC of the European Parliament and of the Council on the protection of groundwater against pollution and deterioration(**c**) as amended by Commission Directive 2014/80/EU(**d**); and
- Directive 2000/60/EC of the European Parliament and of the Council establishing a framework for Community action in the field of water policy(**e**) as last amended by Commission Directive 2014/101/EU(**f**).

(**a**) OJ L 348, 24.12.2008, p.84.
(**b**) OJ L 226, 24.8.2013, p.1.
(**c**) OJ L 372, 27.12.2006, p.19.
(**d**) OJ L 182, 21.6.2014, p.52.
(**e**) OJ L 327, 22.12.2000, p.1, as amended by Decision No 2455/2001/EC (OJ L 331, 15.12.2001, p.1), Directive 2008/32/EC (OJ L 81, 20.3.2008, p.60), Directive 2008/105/EC (OJ L 348, 24.12.2008, p.84), Directive 2009/31/EC (OJ L 140, 5.6.2009, p.114) and Directive 2013/39/EU (OJ L 226, 24.8.2013, p.1).
(**f**) OJ L 311, 31.10.2014, p.32.

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