



STATUTORY INSTRUMENTS.

S.I. No. 386 of 2015



EUROPEAN UNION ENVIRONMENTAL OBJECTIVES (SURFACE
WATERS) (AMENDMENT) REGULATIONS 2015

EUROPEAN UNION ENVIRONMENTAL OBJECTIVES (SURFACE WATERS) (AMENDMENT) REGULATIONS 2015

I, ALAN KELLY, Minister for the Environment, Community and Local Government, in exercise of the powers conferred on me by section 3 of the European Communities Act 1972 (No. 27 of 1972) and for the purpose of giving effect to Directive 2013/39/EU¹ of the European Parliament and of the Council of 12 August 2013 amending Directive 2000/60/EC and 2008/105/EC as regards priority substances in the field of water policy, Commission Decision (EU) 2013/480 of 20 September 2013² establishing, pursuant to Directive 2000/60/EC of the European Parliament and of the Council, the values of the Member State monitoring system classifications as a result of the intercalibration exercise and repealing Decision 2008/915/EC and Commission Implementing Decision (EU) 2015/495³ of 20 March 2015 establishing a watch list of substances for Union-wide monitoring in the field of water policy pursuant to Directive 2008/105/EC of the European Parliament and of the Council, hereby make the following Regulations:

(1) These Regulations may be cited as the European Union Environmental Objectives (Surface Waters) (Amendment) Regulations 2015.

(2) In these Regulations—

“the 2003 Regulations” means the European Communities (Water Policy) Regulations 2003 (S.I. No. 722 of 2003), as amended by the European Union (Water Policy) Regulations 2014 (S.I. No. 350 of 2014);

“the 2009 Regulations” means the European Communities Environmental Objectives (Surface Waters) Regulations 2009 (S.I. No. 272 of 2009);

“the 2012 Regulations” means the European Communities Environmental Objectives (Surface Waters) (Amendment) Regulations 2012 (S.I. No. 327 of 2012).

(3) The 2003 Regulations are amended in Regulation 3 by the insertion of the following definition after the definition of “international river basin district”:

“‘limit of quantification’ has the same meaning as in the European Communities (Technical Specifications for the Chemical Analysis and Monitoring of Water Status) Regulations 2011 (S.I. No. 489 of 2011);”.

¹O.J. No. L226/1, 24 August 2013

²O.J. No. L266/1, 8 October 2013

³O.J. No. L78/40, 24 March 2015

Notice of the making of this Statutory Instrument was published in “Iris Oifigiúil” of 15th September, 2015.

(4) The 2003 Regulations are amended in Regulation 10 by the insertion of the following after paragraph (7):

“(8) The EPA shall, not later than 22 December 2018, establish and submit to the European Commission a supplementary monitoring programme to include:

- (a) the newly identified substances numbered 22, 23, 24, 25, 26 and 27 and
- (b) the substances numbered 16, 17, 18, 19, 20 and 21

in Tables 11 and 12 respectively of Schedule 6 to the European Communities Environmental Objectives (Surface Waters) Regulations 2009, as amended by Regulation 16 of the European Union Environmental Objectives (Surface Waters) (Amendment) Regulations 2015.”.

(5) The 2003 Regulations are amended in Regulation 12 by the substitution of the following for paragraph (1)(b):

“(b) establish a programme of measures in accordance with Article 11 of the Directive in order to achieve those objectives, including:

- (i) a preliminary programme of measures by 22 December 2018, covering the newly identified substances numbered 22, 23, 24, 25, 26 and 27 and the substances numbered 16, 17, 18, 19, 20 and 21 in Tables 11 and 12 respectively of Schedule 6 to the European Communities Environmental Objectives (Surface Waters) Regulations 2009, as amended by Regulation 16 of the European Communities Environmental Objectives (Surface Waters) (Amendment) Regulations 2015, and
- (ii) a final programme of measures relating to the substances listed at paragraph (1)(b)(i), which shall be established by 22 December 2021 and shall be implemented and made fully operational as soon as possible after that date and not later than 22 December 2024, and”.

(6) The 2003 Regulations are amended in Regulation 13 by the substitution of the following for paragraph (4):

“(4) A river basin management plan shall include:

- (a) the information set out in Annex VII of the Directive which may be supplemented by the production of such additional detailed programmes and management plans for sub-basin, sector, issue or water type to deal with particular aspects of water management as the relevant authorities consider appropriate;
- (b) a table presenting the limits of quantification of the methods of analysis applied by the EPA in undertaking monitoring for

priority substances, and information on the performance of those methods in relation to the minimum performance criteria laid down in the European Communities (Technical Specifications for the Chemical Analysis and Monitoring of Water Status) Regulations 2011 (S.I. No. 489 of 2011);

(c) for the priority substances for which the option in Regulation 41(7) of the European Communities Environmental Objectives (Surface Waters) Regulations 2009, as amended by Regulation 9 of the European Union Environmental Objectives (Surface Waters) (Amendment) Regulations 2015, is used by the EPA:

(i) the reasons and basis for using that option;

(ii) where an alternative environmental quality standard is used, evidence that that environmental quality standard offers at least the same level of protection as the EQS laid down in Tables 11 and 12 of Schedule 6 to the European Communities Environmental Objectives (Surface Waters) Regulations 2009, as amended by the European Union Environmental Objectives (Surface Waters) (Amendment) Regulations 2015, including the data and methodology used to derive the environmental quality standard, and the categories of surface water to which it applies;

(iii) for comparison with the information referred to in paragraph (a), the limits of quantification of the methods of analysis for the matrices specified in Tables 11 and 12 of Schedule 6 to the European Communities Environmental Objectives (Surface Waters) Regulations 2009, as amended by the European Union Environmental Objectives (Surface Waters) (Amendment) Regulations 2015, including information on the performance of those methods in relation to the minimum performance criteria laid down in the European Communities (Technical Specifications for the Chemical Analysis and Monitoring of Water Status) Regulations 2011 (S.I. No. 489 of 2011); and

(d) justification for the frequency of monitoring applied in accordance with Regulation 41(5) of the European Communities Environmental Objectives (Surface Waters) Regulations 2009, as amended by Regulation 9 of the European Union Environmental Objectives (Surface Waters) (Amendment) Regulations 2015, if monitoring intervals are longer than one year.”.

(7) The 2009 Regulations are amended in Regulation 3 by:

(a) the insertion of the following definition after the definition of “artificial water body”:

“‘biota taxon’ means a particular aquatic taxon within the taxonomic rank “sub-phylum”, “class” or their equivalent;”

- (b) the insertion of the following definition after the definition of “Directive 2008/105/EC”:

“‘Directive 2013/39/EU’ means Directive 2013/39/EU of the European Parliament and of the Council of 12 August 2013 amending Directive 2000/60/EC and 2008/105/EC as regards priority substances in the field of water policy;” and

- (c) the insertion of the following definitions after the definition of “lake”:

“‘limit of quantification’ has the same meaning as in the European Communities (Technical Specifications for the Chemical Analysis and Monitoring of Water Status) Regulations 2011 (S.I. No. 489 of 2011);

‘matrix’ means a compartment of the aquatic environment, namely water sediment or biota;”.

- (8) The 2009 Regulations are amended in Regulation 28 by substituting the following paragraph for paragraph (1):

“(1) A surface water body whose status is determined to be high or good ecological status (or good ecological potential as the case may be) and good surface water chemical status, when classified by the Agency in accordance with these Regulations, shall not deteriorate in status.”

- (9) The 2009 Regulations are amended in Regulation 41 by the insertion of the following paragraphs after paragraph (3):

“(4) Where a biota environmental quality standard is established for a substance in Tables 11 and 12 of Schedule 6 of these Regulations, the biota environmental quality standard shall be applied in the first instance by the Agency in determining chemical status of a given surface water body. Where no biota environmental quality standard has been established for a substance, the appropriate water environmental quality standard shall be applied.

(5) For substances in Tables 11 and 12 of Schedule 6 for which a biota or sediment environmental quality standard is applied, the Agency shall monitor the substance in the relevant matrix at least once every year, unless technical knowledge and expert judgment justify another interval.

(6) Where a potential risk to, or via, any given surface water body from acute exposure has been identified as a result of measured or estimated concentrations or emissions and where a biota or sediment environmental quality standard is being applied, the Agency shall ensure that monitoring of that surface water body is carried out and shall apply the MAC-EQS standards established in Tables 11 and 12 of Schedule 6.

(7) The Agency may, in relation to one or more categories of surface water, apply an environmental quality standard for a matrix other than water, sediment or biota or, where relevant, for a biota taxon other than those specified in Tables 11 and 12 of Schedule 6 and shall apply the relevant EQS specified in Tables 11 and 12 of Schedule 6 or, if none is included for the relevant matrix or biota taxon, establish an EQS that offers at least the same level of protection as the EQS specified in Tables 11 and 12 of Schedule 6.

(8) Paragraph (7) only applies where the method of analysis used for the chosen matrix or biota taxon fulfils the minimum performance criteria laid down in the European Communities (Technical Specifications for the Chemical Analysis and Monitoring of Water Status) Regulations 2011 (S.I. No. 489 of 2011) and where those criteria are not met for any matrix, the Agency shall ensure that monitoring is carried out using best available techniques not entailing excessive costs and that the method of analysis performs at least as well as that available for water, sediment or biota for the relevant substance.

(9) Where the calculated mean value of a measurement, when carried out using the best available technique not entailing excessive costs, is considered to be less than the limit of quantification and the limit of quantification of that technique is above the environmental quality standard specified in Tables 11 and 12 of Schedule 6, the result for the substance being measured shall not be considered for the purposes of assessing the overall chemical status of the given surface water body.”

(10) The 2009 Regulations are amended in Regulation 42 by the substitution of the following subparagraphs for subparagraphs (1) and (2):

- “(a) natural background concentrations for metals and their compounds where such concentrations prevent compliance with the relevant environmental quality standard, and
- (b) hardness, pH value, dissolved organic carbon or other water quality parameters that affect the bioavailability of metals, the bioavailability concentrations being determined using appropriate bioavailability monitoring.”

(11) The 2009 Regulations are amended by the insertion of the following after Regulation 68:

“PART VI

DUTY TO UNDERTAKE MONITORING OF WATCH LIST SUBSTANCES

69. The Agency shall monitor each substance in the watch list contained in Table 13 of Schedule 6 at selected representative monitoring stations over a minimum 12-month period, the monitoring period to commence on or before 14 September 2015. For each substance included in subsequent lists

published by the European Commission, the Agency shall commence monitoring of that substance within six months of its inclusion on the list.

70. For each substance in Table 13 of Schedule 6, the Agency must select at least four monitoring stations that are considered representative for that individual substance.

71. In selecting the representative monitoring stations, the monitoring frequency and monitoring timing for each substance, the Agency shall take into account the use patterns and possible occurrence of the substance. The frequency of monitoring shall be no less than once per year.

72. Where the Agency provides sufficient, comparable, representative and recent monitoring data for a particular substance from existing monitoring programmes or studies, it may decide not to undertake additional monitoring for that substance, provided that the substance was monitored using a methodology that satisfies the requirements of the technical guidelines developed by the Commission in accordance with Article 8b(5) of Directive 2013/39/EU.”

(12) The 2009 Regulations are amended in Schedule 1 by:

- (a) the deletion of “The Radiological Protection Institute of Ireland”, and
- (b) the substitution of “Inland Fisheries Ireland” for “The Central Fisheries Board”

in the list of relevant public authorities.

(13) The 2009 Regulations are amended in Table 7 of Schedule 4 by the substitution of the word “status” for “subtatus” in the third column of the fourth row, opposite “Lake water body”.

(14) The 2009 Regulations are amended in Schedule 5 by the substitution of the following Table for Table 8:

“Table 8 – Biological quality elements

RIVERS (All types)

Biological Quality Element	Classification System	River Type	Ecological Quality Ratio	
			High-good boundary	Good-moderate boundary
Macroinvertebrates	Q Quality System (Q-value)	All	0.85	0.75
Phytobenthos	Revised form of Trophic diatom index (TDI)*		0.93	0.78
Fish	Fish Classification Scheme 2 Ireland (FCS2)	All	0.845	0.540

Note: *To be used only in rivers with alkalinity less than 150mg/l CaCO³

LAKES

Biological Quality Element	Classification System	Lake Type	Ecological Quality Ratio	
			High-good boundary	Good-moderate boundary
Phytoplankton ⁽¹⁾	IE Lake Phytoplankton Index ⁽²⁾	All	0.8	0.6
Fish fauna	FIL2	Type 1-8 ⁽³⁾	0.76	0.53
Phytobenthos	Lake Trophic Diatom Index (IE)	All	0.9	0.63

(1) The phytoplankton boundary conditions for lake types 7,8,11 and 12 shall apply on an interim basis for classifying lake types not currently listed. EQR boundary conditions are yet to be developed for shallow calcareous lakes.

(2) Growing season (March to October) mean value. A minimum of 4 samples distributed throughout the growing season is required in any one year. Phytoplankton biomass is not an appropriate indicator for assessing lake trophic status when zebra mussels are present.

- (3) Type 1: Low alkalinity, shallow and small lakes
 Type 2: Low alkalinity, shallow and large lakes
 Type 3: Low alkalinity, deep and small lakes
 Type 4: Low alkalinity, deep and large lakes
 Type 5: Moderate alkalinity, shallow and small lakes
 Type 6: Moderate alkalinity, shallow and large lakes
 Type 7: Moderate alkalinity, deep and small lakes
 Type 8: Moderate alkalinity, deep and large lakes

Where

Low alkalinity lakes: <20 mg/l CaCO₃
 Moderate alkalinity lakes: 20-100 mg/l CaCO₃

Shallow lakes: <4 metres
 Deep lakes: >4 metres

Small lakes: <50 hectares
 Large lakes: >50 hectares

TRANSITIONAL WATERS (All types with the exception of transitional lagoons)

Biological Quality Element	Classification System	Ecological Quality Ratio	
		High-good boundary	Good-moderate boundary
Fish	TFCI — Transitional Fish Classification Index	0.81	0.58

COASTAL WATERS (All types with the exception of coastal water lagoons)

Biological Quality Element	Classification System	Ecological Quality Ratio		High-good boundary	Good-moderate boundary
		High-good	Good-moderate	Chlorophyll ($\mu\text{g/l}$) ⁽¹⁾	
Phytoplankton	Phytoplankton biomass (Chlorophyll)	0.66	0.33	2.5 (median) and 5.0 (90%ile) ⁽²⁾	5.0 (median) and 10.0 (90%ile) ⁽²⁾
				5.0 (median) and 10.0 (90%ile) ⁽³⁾	10.0 (median) and 20.0 (90%ile) ⁽³⁾
	Phytoplankton composition	0.84	0.43	Percentage of single taxa counts above thresholds	
				20	39

(1) Growing season March to September

(2) Cold acetone extraction method

(3) Hot methanol extraction method

COASTAL AND TRANSITIONAL WATERS (All types with the exception of transitional and coastal water lagoons)

Biological Quality Element	Classification System	Ecological Quality Ratio	
		High-good boundary	Good-moderate boundary
Macroalgae	Rocky shore reduced species list multimetric system	0.80	0.60
	Opportunistic macroalgae multimetric system	0.80	0.60

(15) The 2009 Regulations are amended in Table 9 of Schedule 5 by:

(a) the insertion of “good status” before “<4.0mg/l” in the fourth column of the second row of the sub-table headed: “OXYGENATION CONDITIONS (BIOCHEMICAL OXYGEN DEMAND)”; and

(b) the substitution of the following for the text in the fourth column of the third row of the sub-table headed “NUTRIENT CONDITIONS”:

“Good status \leq 2.6 (for 0 psu⁽²⁾)

Good status \leq 0.25 (for 34.5 psu⁽²⁾)

High status \leq 0.17 (for 34.5 psu⁽²⁾) ”

(16) The 2009 Regulations are amended in Schedule 6 by the substitution of the following for Tables 11 and 12:

“Table 11**The environmental quality standards (EQS) for priority substances and certain other pollutants to apply for the purpose of assigning chemical status**

With the exception of cadmium, lead, mercury and nickel (hereinafter “metals”), the EQS values in Tables 11 and 12 are expressed as total concentrations in the whole water sample. In the case of metals, the EQS refers to the dissolved concentration i.e. the dissolved fraction of a water sample obtained by filtration through a 0.45 µm filter or any equivalent pre-treatment or, where specifically indicated, to the bioavailable concentration.

Priority Substances

AA: annual average¹

MAC: maximum allowable concentration

Unit: [µg/l]

[µg/kg wet weight] for column (8)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
N ^o	Name of substance	Chemical Abstracts Service number	AA-EQS ² Inland surface waters ³	AA-EQS ² Other surface waters	MAC-EQS ⁴ Inland surface waters ³	MAC-EQS ⁴ Other surface waters	EQS Biota ⁵
(1)	Alachlor	15972-60-8	0.3	0.3	0.7	0.7	
(2)	Atrazine	1912-24-9	0.6	0.6	2.0	2.0	
(3)	Benzene	71-43-2	10	8	50	50	
(4)	Carbon-tetrachloride ⁶	56-23-5	12	12	not applicable	not applicable	
(5)	Chlorfenvinphos	470-90-6	0.1	0.1	0.3	0.3	
(6)	Chlorpyrifos (Chlorpyrifos-ethyl)	2921-88-2	0.03	0.03	0.1	0.1	
(7a)	Cyclodiene pesticides: Aldrin ⁶ Dieldrin ⁶ Endrin ⁶ Isodrin ⁶	309-00-2 60-57-1 72-20-8 465-73-6	Σ=0.01	Σ=0.005	not applicable	not applicable	
(7b)	DDT total ^{6,7}	not applicable	0.025	0.025	not applicable	not applicable	
	para-para-DDT ⁶	50-29-3	0.01	0.01	not applicable	not applicable	
(8)	1,2-Dichloroethane	107-06-2	10	10	not applicable	not applicable	
(9)	Dichloromethane	75-09-2	20	20	not applicable	not applicable	
(10)	Diuron	330-54-1	0.2	0.2	1.8	1.8	
(11)	Fluoranthene ⁸	206-44-0	0.0063	0.0063	0.12	0.12	30
(12)	Isoproturon	34123-59-6	0.3	0.3	1.0	1.0	

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
N°	Name of substance	Chemical Abstracts Service number	AA-EQS ² Inland surface waters ³	AA-EQS ² Other surface waters	MAC-EQS ⁴ Inland surface waters ³	MAC-EQS ⁴ Other surface waters	EQS Biota ⁵
(13)	Lead and its compounds ⁸	7439-92-1	1.2 ⁹	1.3	14	14	
(14)	Naphthalene ⁸	91-20-3	2	2	130	130	
(15)	Nickel and its ⁸ compounds	7440-02-0	4 ⁹	8.6	34	34	
(16)	Octylphenol ((4-(1,1',3,3'-tetramethylbutyl)-phenol))	140-66-9	0.1	0.01	not applicable	not applicable	
(17)	Pentachloro-phenol	87-86-5	0.4	0.4	1	1	
(18)	Simazine	122-34-9	1	1	4	4	
(19a)	Tetrachloro-ethylene ⁶	127-18-4	10	10	not applicable	not applicable	
(19b)	Trichloro-ethylene ⁶	79-01-6	10	10	not applicable	not applicable	
(20)	Trichloro-benzenes	12002-48-1	0.4	0.4	not applicable	not applicable	
(21)	Trichloro-methane	67-66-3	2.5	2.5	not applicable	not applicable	
(22)	Aclonifen ¹⁰	74070-46-5	0.12	0.012	0.12	0.012	
(23)	Bifenox ¹⁰	42576-02-3	0.012	0.0012	0.04	0.004	
(24)	Cybutryne ¹⁰	28159-98-0	0.0025	0.0025	0.016	0.016	
(25)	Cypermethrin ¹⁰	52315-07-8	8 x 10 ⁻⁵	8 x 10 ⁻⁶	6 x 10 ⁻⁴	6 x 10 ⁻⁵	
(26)	Dichlorvos ¹⁰	62-73-7	6 x 10 ⁻⁴	6 x 10 ⁻⁵	7 x 10 ⁻⁴	7 x 10 ⁻⁵	
(27)	Terbutryn ¹⁰	886-50-0	0.065	0.0065	0.34	0.034	

¹ The calculation of the arithmetic mean and the analytical method used must be in accordance with the technical specifications to be adopted for chemical monitoring and quality of analytical results in accordance with Directive 2000/60/EC of the European Parliament and of the Council, including how to apply an EQS where there is no appropriate analytical method meeting the minimum performance criteria.

² This parameter is the Environmental Quality Standard expressed as an annual average value (EQS-AA). Unless otherwise specified, it applies to the total concentration of all isomers.

³ Inland surface waters encompass rivers and lakes and related artificial or heavily modified water bodies.

⁴ This parameter is the Environmental Quality Standard expressed as a maximum allowable concentration (MAC-EQS). Where the MAC-EQS are marked as "not applicable", the AA-EQS values are 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.

⁵ Unless otherwise indicated, the biota EQS relate to fish. An alternative biota taxon, or another matrix, may be monitored instead, as long as the EQS applied provides an equivalent level of protection. For substance numbered 11 (Fluoranthene), the biota EQS refers to crustaceans and molluscs. For the purpose of assessing chemical status, monitoring of Fluoranthene in fish is not appropriate.

⁶ This substance is not a priority substance but one of the other pollutants for which the EQS are identical to those laid down in community legislation that applied prior to Directive 2008/105/EC of the European Parliament and Council on environmental quality standards in the field of water policy.

⁷ 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).

⁸ The EQS for this substance shall take effect from 22 December 2015, with the aim of achieving good surface water chemical status in relation to this substance by 22 December 2021 by means of programmes

of measures included in updates of river basin management plans produced in accordance with Article 13 of the 2003 Regulations.

⁹ These EQS refer to bioavailable concentrations of the substances.

¹⁰ The EQS for this substance shall take effect from 22 December 2018, with the aim of achieving good surface water chemical status in relation to this substance by 22 December 2027 and preventing deterioration in the chemical status of surface water bodies in relation to this substance.

Table 12

The environmental quality standards (EQS) for priority hazardous substances to apply for the purpose of assigning chemical status

PRIORITY HAZARDOUS SUBSTANCES

AA: annual average¹

MAC: maximum allowable concentration

Unit: [µg/l]

[µg/kg wet weight] for column (8)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
N ^o	Name of substance	Chemical Abstracts Service number	AA-EQS ² Inland surface waters ³	AA-EQS ² Other surface waters	MAC-EQS ⁴ Inland surface waters ³	MAC-EQS ⁴ Other surface waters	EQS Biota ⁵
(1)	Anthracene ⁶	120-12-7	0.1	0.1	0.1	0.1	
(2)	Brominated diphenylether ^{6,7}	32534-81-9			0.14	0.014	0.0085
(3)	Cadmium and its compounds (depending on water hardness classes) ⁸	7440-43-9	≤ 0.08 (Class 1) 0.08 (Class 2) 0.09 (Class 3) 0.15 (Class 4) 0.25 (Class 5)	0.2	≤ 0.45 (Class 1) 0.45 (Class 2) 0.6 (Class 3) 0.9 (Class 4) 1.5 (Class 5)	≤ 0.45 (Class 1) 0.45 (Class 2) 0.6 (Class 3) 0.9 (Class 4) 1.5 (Class 5)	
(4)	C10-13 Chloroalkanes ⁸	85535-84-8	0.4	0.4	1.4	1.4	
(5)	Di(2-ethylhexyl)-phthalate (DEHP)	117-81-7	1.3	1.3	not applicable	not applicable	
(6)	Endosulfan	115-29-7	0.005	0.0005	0.01	0.004	
(7)	Hexachlorobenzene	118-74-1			0.05	0.05	10
(8)	Hexachlorobutadiene	87-68-3			0.6	0.6	55
(9)	Hexachlorocyclohexane	608-73-1	0.02	0.002	0.04	0.02	
(10)	Mercury and its compounds	7439-97-6			0.07	0.07	20
(11)	Nonylphenol (4-Nonylphenol)	84852-15-3	0.3	0.3	2.0	2.0	

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
N ^o	Name of substance	Chemical Abstracts Service number	AA-EQS ² Inland surface waters ³	AA-EQS ² Other surface waters	MAC-EQS ⁴ Inland surface waters ³	MAC-EQS ⁴ Other surface waters	EQS Biota ⁵
(12)	Pentachlorobenzene	608-93-5	0.007	0.0007	not applicable	not applicable	
(13)	Polyaromatic hydrocarbons (PAH) ^{6,9}	not applicable	not applicable	not applicable	not applicable	not applicable	
	Benzo(a)pyrene	50-32-8	1.7 x 10 ⁻⁴	1.7 x 10 ⁻⁴	0.27	0.027	5
	Benzo(b)fluoranthene	205-99-2	see footnote 9	see footnote 9	0.017	0.017	see footnote 9
	Benzo(k)fluoranthene	207-08-9	see footnote 9	see footnote 9	0.017	0.017	see footnote 9
	Benzo(g,h,i)-perylene	191-24-2	see footnote 9	see footnote 9	8.2 x 10 ⁻³	8.2 x 10 ⁻⁴	see footnote 9
	Indeno(1,2,3-cd)-pyrene	193-39-5	see footnote 9	see footnote 9	not applicable	not applicable	see footnote 9
(14)	Tributyltin compounds (Tributhyltin-cation)	36643-28-4	0.0002	0.0002	0.0015	0.0015	
(15)	Trifluralin	1582-09-8	0.03	0.03	not applicable	not applicable	
(16)	Dicofol ¹²	115-32-2	1.3 x 10 ⁻³	3.2 x 10 ⁻⁵	not applicable ¹⁰	not applicable ¹⁰	33
(17)	Perfluoro-octane sulfonic acid and its derivatives (PFOS) ¹²	1763-23-1	6.5 x 10 ⁻⁴	1.3 x 10 ⁻⁴	36	7.2	9.1
(18)	Quinoxifen ¹²	124495-18-7	0.15	0.015	2.7	0.54	
(19)	Dioxins and dioxin-like compounds ¹²	see footnote 10 Annex X to Directive 2000/60/EC			not applicable	not applicable	sum of PCDD+PCDF+PCB-DL 0.0065 µg.kg-1 TEQ ¹¹
(20)	Hexabromocyclododecane (HBCDD) ¹²	see footnote 12 Annex X to Directive 2000/60/EC	0.0016	0.0008	0.5	0.05	167
(21)	Heptachlor and heptachlor epoxide ¹²	76-44-8/1024-57-3	2 x 10 ⁻⁷	1 x 10 ⁻⁸	3 x 10 ⁻⁴	3 x 10 ⁻⁵	6.7 x 10 ⁻³

¹ The calculation of the arithmetic mean and the analytical method used must be in accordance with the technical specifications for chemical monitoring and quality of analytical results to be adopted in accordance with Directive 2000/60/EC of the European Parliament and of the Council, including how to apply an EQS where there is no appropriate analytical method meeting the minimum performance criteria.

² This parameter is the Environmental Quality Standard expressed as an annual average value (EQS-AA). Unless otherwise specified, it applies to the total concentration of all isomers.

³ Inland surface waters encompass rivers and lakes and related artificial or heavily modified water bodies.

⁴ This parameter is the Environmental Quality Standard expressed as a maximum allowable concentration (EQS-MAC). Where the MAC-EQS are marked as "not applicable", the AA EQS values are 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.

⁵ Unless otherwise indicated, the biota EQS relate to fish. An alternative biota taxon, or another matrix, may be monitored instead, as long as the EQS applied provides an equivalent level of protection. For PAHs, the biota EQS refers to crustaceans and molluscs. For the purpose of assessing chemical status,

- monitoring of PAHs in fish is not appropriate. For Dioxins and dioxin-like compounds, the biota EQS relates to fish, crustaceans and molluscs, in line with section 5.3 of the Annex to Commission Regulation (EU) No. 1259/2011 of 2 December 2011 amending Regulation (EC) No. 1881/2006 as regards maximum levels for dioxins, dioxin-like PCBs and non-dioxin-like PCBs in foodstuffs (O.J. L 320, 3.12.2011, p. 18)
- ⁶ The EQS for this substance shall take effect from 22 December 2015, with the aim of achieving good surface water chemical status in relation to these substances by 22 December 2021 by means of programmes of measures included in updates of river basin management plans produced in accordance with Article 13 of the 2003 Regulations.
- ⁷ For the group of priority substances covered by brominated diphenylethers listed in Decision 2455/2001/EC, an EQS is established only for congener numbers 28, 47, 99, 100, 153 and 154.
- ⁸ For Cadmium and its compounds the EQS values vary dependent upon the hardness of the water as specified in five class categories (Class 1: <40 mg CaCO₃/l, Class 2: 40 to <50 mg CaCO₃/l, Class 3: 50 to <100 mg CaCO₃/l, Class 4: 100 to <200 mg CaCO₃/l and Class 5: ≥200 mg CaCO₃/l).
- ⁹ No indicative parameter is provided for this group of substances. The indicative parameter(s) must be defined through the analytical method.
- ¹⁰ For the group of priority substances of polyaromatic hydrocarbons (PAH), 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.
- ¹¹ There is insufficient information available to set a MAC-EQS for these substances.
- ¹² 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 Equivalent Factors.
- ¹³ The EQS for this substance shall take effect from 22 December 2018, with the aim of achieving good surface water chemical status in relation to this substance by 22 December 2027 and preventing deterioration in the chemical status of surface water bodies in relation to this substance.”

(17) The 2009 Regulations are amended in Schedule 6 by the insertion of the following after Table 12:

“Table 13

Watch list of substances for Union-wide monitoring as set out in Article 8b of Directive 2013/39/EU

Name of substance/group of substances	CAS number ¹	EU number ²	Indicative analytical method ^{3,4,5}	Maximum acceptable method detection limit (ng/l)
17-Alpha-ethinylestradiol (EE2)	57-63-6	200-342-2	Large-volume SPE — LC-MS-MS	0.035
17-Beta-estradiol (E2), Estrone (E1)	50-28-2, 53-16-7	200-023-8	SPE — LC-MS-MS	0.4
Diclofenac	15307-86-5	239-348-5	SPE — LC-MS-MS	10
2,6-Ditert-butyl-4-methylphenol	128-37-0	204-881-4	SPE — GC-MS	3160
2-Ethylhexyl 4-methoxycinnamate	5466-77-3	226-775-7	SPE — LC-MS-MS or GC-MS ⁷	6000
Macrolide antibiotics ⁶			SPE — LC-MS-MS	90
Methiocarb	2032-65-7	217-991-2	SPE — LC-MS-MS or GC-MS	10
Neonicotinoids ⁷			SPE — LC-MS-MS	9
Oxadiazon	19666-30-9	243-215-7	LLE/SPE — GC-MS	88
Tri-allate	2303-17-5	218-962-7	LLE/SPE — GC-MS or LC-MS-MS	670

¹ Chemical Abstracts Service.

² European Union number — not available for all substances.

³ To ensure comparability of results from different Member States, all substances shall be monitored in whole water samples.

⁴ Extraction methods:
LLE — liquid liquid extraction.
SPE — solid-phase extraction.

Analytical methods:

GC-MS — Gas chromatography-mass spectrometry.

LC-MS-MS — Liquid chromatography (tandem) triple quadrupole mass spectrometry.

⁵ For monitoring 2-Ethylhexyl 4-methoxycinnamate in suspended particulate matter (SPM) or in sediment (size < 63µm), the following analytical method is indicated: SLE (solid liquid extraction) — GC-MS, with a maximum detection limit of 0.2 mg/kg.

⁶ Erythromycin (CAS number 114-07-8, EU number 204-040-1), Clarithromycin (CAS number 81103-11-9), Azithromycin (CAS number 83905-01-5, EU number 617-500-5).

⁷ Imidacloprid (CAS number 105827-78-9/ 138261-41-3; EU number 428-040-8), Thiachloprid (CAS number 111988-49-9), Thiamethoxam (CAS number 153719-23-4, EU number 428-650-4), Clothianidin (CAS number 210880-92-5, EU number 433-460-1), Acetamiprid (CAS number 135410-20-7/ 160430-64-8)".



GIVEN under my Official Seal,
10 September 2015.

ALAN KELLY,
Minister for the Environment, Community and
Local Government.

EXPLANATORY NOTE

(This Note is not part of the Instrument and does not purport to be a legal interpretation.)

These Regulations amend the European Communities (Water Policy) Regulations 2003 (S.I. No. 722 of 2003) and the European Communities Environmental Objectives (Surface Waters) Regulations 2009 (S.I. No. 272 of 2009).

The purpose of the Regulations is to give effect to the requirements of Directive 2013/39/EU, Commission Decision (EU) 2013/480 of 20 September 2013 and Commission Implementing Decision (EU) 2015/495 of 20 March 2015. The Regulations revise the environmental quality standards for a number of priority substances, add 12 new substances to the original list, and include additional environmental quality standards for biological quality elements. The Regulations also provide for the establishment of a watchlist to monitor concentrations of emerging pollutants and other substances of concern in the aquatic environment, to be updated every 24 months.

BAILE ÁTHA CLIATH
ARNA FHOILSIÚ AG OIFIG AN tSOLÁTHAIR
Le ceannach díreach ó
FOILSEACHÁIN RIALTAIS,
52 FAICHE STIABHNA, BAILE ÁTHA CLIATH 2
(Teil: 01 - 6476834 nó 1890 213434; Fax: 01 - 6476843)
nó trí aon díoltóir leabhar.

DUBLIN
PUBLISHED BY THE STATIONERY OFFICE
To be purchased from
GOVERNMENT PUBLICATIONS,
52 ST. STEPHEN'S GREEN, DUBLIN 2.
(Tel: 01 - 6476834 or 1890 213434; Fax: 01 - 6476843)
or through any bookseller.

€3.81

