



STATUTORY INSTRUMENTS.

S.I. No. 288 of 2022

EUROPEAN COMMUNITIES ENVIRONMENTAL OBJECTIVES
(SURFACE WATERS) (AMENDMENT) REGULATIONS 2022

CONTENTS

Regulation

PART 1

PRELIMINARY AND GENERAL

1. Citation
2. Definition

PART 2

AMENDMENTS TO PRINCIPAL REGULATIONS

3. Amendment of Article 3 of Principal Regulations
4. Artificial and heavily modified surface status classifications
5. Amendment of Article 32 of Principal Regulations
6. Amendment of Article 44 of Principal Regulations
7. Insertion of Part IVA into Principal Regulations
8. Amendment of Schedule 2 to Principal Regulations
9. Amendment of Schedule 4 to Principal Regulations

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**EUROPEAN COMMUNITIES ENVIRONMENTAL OBJECTIVES
(SURFACE WATERS) (AMENDMENT) REGULATIONS 2022**

I, DARRAGH O'BRIEN, Minister for Housing, Local Government and Heritage, 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 further effect to Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000¹ establishing a framework for Community action in the field of water policy, as amended, hereby make the following regulations:

PART 1
PRELIMINARY AND GENERAL

Citation

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

Definition

2. In these Regulations, “Principal Regulations” means the European Communities Environmental Objectives (Surface Waters) Regulations 2009 (S.I. No. 272 of 2009).

PART 2
AMENDMENTS TO PRINCIPAL REGULATIONS

Amendment of Article 3 of Principal Regulations

3. Article 3 of the Principal Regulations is amended in the definition of “ecological status” by substituting “Table 4A in Schedule 4” for “the Water Framework Directive”.

Artificial and heavily modified surface status classifications

4. The Principal Regulations are amended by inserting the following Article after Article 29:

“Artificial and heavily modified surface status classifications

29A. (1) The quality elements applicable to artificial and heavily modified surface water bodies shall be those applicable to whichever

¹ OJ No. L 327, 22.12.2000, p. 1.

of the following natural surface water categories most clearly resembles the heavily modified or artificial water body concerned:

- (a) rivers;
- (b) lakes;
- (c) transitional waters;
- (d) coastal waters.

(2) For the purposes of these Regulations, the definitions in Table 4A in Schedule 4 shall apply.”.

Amendment of Article 32 of Principal Regulations

5. Article 32 of the Principal Regulations is amended by the substitution of the following paragraphs for paragraphs (1) and (2):

- “(1) All practicable steps are taken to prevent further deterioration in status and in order not to compromise the achievement of the objectives of these Regulations in other bodies of water not affected by those circumstances;
- (2) The conditions under which circumstances that are exceptional or that could not reasonably have been foreseen may be declared, including the adoption of the appropriate indicators, are stated in the river basin management plan;”.

Amendment of Article 44 of Principal Regulations

6. Article 44 of the Principal Regulations is amended by substituting “Table 4A in Schedule 4” for “section 1.2 of Annex V of the Water Framework Directive” in each place where it occurs.

Insertion of Part IVA into Principal Regulations

7. The Principal Regulations are amended by the insertion of the following Part after Part IV:

“PART IVA – MONITORING OF ECOLOGICAL AND CHEMICAL STATUS

Procedure for setting chemical quality standards

51A. (1) The Agency shall establish and maintain a surface water monitoring network in accordance with the requirements of this Article and article 10(1) of the 2003 Regulations.

(2) Where possible, the monitoring network referred to in paragraph (1), shall obtain both acute and chronic data for the taxa set out in paragraph (3) which are relevant for the water body type concerned as well as any other aquatic taxa for which data are available.

(3) The ‘base set’ of taxa, referred to in paragraph (2), are the following:

- (a) algae or macrophytes;
- (b) daphnia or representative organisms for saline waters;
- (c) fish.

(4) In deriving environmental quality standards for pollutants listed in points 1 to 9 of Schedule 1 to the Waste Water Discharge (Authorisation) Regulations 2007 (S.I. No. 684 of 2007) for the protection of aquatic biota, the Minister, having consulted with the Agency may set standards for water, sediment or biota.

(5) The monitoring network, under paragraph (1), shall be designed so as to provide a coherent and comprehensive overview of ecological and chemical status within each river basin and shall permit classification of water bodies into 5 classes consistent with the normative definitions in Table A in Schedule 4.

(6) River basin management plans shall provide a map or maps showing the surface water monitoring network under this Article.

(7) On the basis of the characterisation under article 7 of the 2003 Regulations and impact assessment carried out in accordance with articles 3 and 5 of those Regulations, for each period to which a river basin management plan applies, the Agency shall establish a surveillance monitoring programme, an operational monitoring programme and, where appropriate, a programme of investigative monitoring.

(8) The Agency shall carry out, or make arrangements to have carried out, the following:

- (a) the monitoring of parameters which are indicative of the status of each relevant quality element;
- (b) in selecting parameters for biological quality elements, the identification of the appropriate taxonomic level required to achieve adequate confidence and precision in the classification of the quality elements.

(9) Estimates of the level of confidence and precision of the results provided by the monitoring programmes established under this Article shall be –

- (a) given in the plan, and
- (b) set out in accordance with the standards mentioned in article 10K of the 2003 Regulations.

Setting the environmental quality standard

51B. The following procedure applies to the setting of a maximum annual average concentration:

- (a) appropriate safety factors shall be set in each case consistent with –
 - (i) the nature and quality of the available data and the guidance given in section 3.3.1 of Part II of the ‘Technical guidance document in support of Commission Directive 93/67/EEC on risk assessment for new notified substances and Commission Regulation (EC) No 1488/94 on risk assessment for existing substances’, and
 - (ii) the safety factors set out in the Table to this Article;
- (b) where data on persistence and bioaccumulation are available, these shall be taken into account in deriving the final value of the environmental quality standard;
- (c) the standard thus derived should be compared with any evidence from field studies. Where anomalies appear, the derivation shall be reviewed to allow a more precise safety factor to be calculated;
- (d) the standard derived shall be subject to peer review and public consultation including to allow a more precise safety factor to be calculated.

TABLE
Safety Factors

	Safety factor
At least one acute L(E)C₅₀ from each of three trophic levels of the base set	1,000
One chronic NOEC (either fish or daphnia or a representative organism for saline waters)	100
Two chronic NOECs from species representing two trophic levels (fish and/or daphnia or a representative organism for saline waters and/or algae)	50
Chronic NOECs from at least three species (normally fish, daphnia or a representative organism for saline waters and algae) representing three trophic levels	10
Other cases, including field data or model ecosystems, which allow more precise safety factors to be calculated and applied	Case-by-case assessment

Presentation of monitoring results and classification of ecological status and ecological potential

51C. (1) In the presentation of monitoring results and in the classification of ecological status and ecological potential, the Agency shall format the presentation in accordance with Tables 1 and 2 in Schedule 3.

(2) The Agency shall indicate, by a black dot on a relevant map, those bodies of water where failure to achieve good status or good ecological potential is due to non-compliance with one or more environmental quality standards which have been established for that body of water in respect of specific synthetic and non-synthetic pollutants (in accordance with the compliance regime concerned).

(3) For the purposes of this Article, in Table 2 in Schedule 3, the ecological potential classification for heavily modified and artificial water bodies is required to be represented by the lower of the values for biological and physiochemical monitoring results.

Standards for monitoring of quality elements

51D. The Agency shall ensure that the methods used for type parameters shall –

- (a) conform to the international standards listed in the Tables to this Article in so far as they cover monitoring, or
- (b) to such other national or international standards in a manner that shall ensure the provision of data of an equivalent scientific quality and comparability.

TABLE 1 - Standards for sampling of biological quality elements

Generic methods for use with the specific methods given in the standards relating to the following biological quality elements:

EN 5667- 3:2012	ISO	Water quality — Sampling — Part 3: Preservation and handling of samples
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TABLE 2 - Standards for phytoplankton

EN 15204:2006	Water quality — Guidance standard on the enumeration of phytoplankton using inverted microscopy (Utermöhl technique)
EN 15972:2011	Water quality — Guidance on quantitative and qualitative investigations of marine phytoplankton
ISO 10260:1992	Water quality — Measurement of biochemical parameters — Spectrometric determination of the chlorophyll-a concentration

TABLE 3 - Standards for macrophyte and phytobenthos

EN 15460:2007	Water quality — Guidance standard for the surveying of macrophytes in lakes
EN 14184:2014	Water quality — Guidance for the surveying of aquatic macrophytes in running waters
EN 15708:2009	Water quality — Guidance standard for the surveying, sampling and laboratory analysis of phytobenthos in shallow running water
EN 13946:2014	Water quality — Guidance for the routine sampling and preparation of benthic diatoms from rivers and lakes

EN 14407:2014	Water quality — Guidance for the identification and enumeration of benthic diatom samples from rivers and lakes
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TABLE 4 - Standards for benthic invertebrate

EN ISO 10870:2012	Water quality — Guidelines for the selection of sampling methods and devices for benthic macroinvertebrates in fresh waters
EN 15196:2006	Water quality — Guidance on sampling and processing of the pupal exuviae of Chironomidae (order Diptera) for ecological assessment
EN 16150:2012	Water quality — Guidance on pro rata multi-habitat sampling of benthic macro-invertebrates from wadeable rivers
EN ISO 19493:2007	Water quality — Guidance on marine biological surveys of hard-substrate communities
EN ISO 16665:2013	Water quality — Guidelines for quantitative sampling and sample processing of marine soft-bottom macro-fauna

TABLE 5 - Standards for fish

EN 14962:2006	Water quality — Guidance on the scope and selection of fish sampling methods
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EN 14011:2003	Water quality — Sampling of fish with electricity
EN 15910:2014	Water quality — Guidance on the estimation of fish abundance with mobile hydroacoustic methods
EN 14757:2005	Water quality — Sampling of fish with multi-mesh gillnets

TABLE 6 - Standards for hydromorphological parameters

EN 14614:2004	Water quality — Guidance standard for assessing the hydromorphological features of rivers
EN 16039:2011	Water quality — Guidance standard on assessing the hydromorphological features of lakes
EN 1650:2014	Water quality — Guidance standard for assessing the hydromorphological features of transitional and costal waters

TABLE 7 - Standards for physico-chemical parameters

Any relevant CEN/ISO standards

”.

Amendment of Schedule 2 to Principal Regulations

8. Schedule 2 to the Principal Regulations is amended by inserting after paragraph 1 the following:

“1A. Measures required under the legislation specified in Article 10 of, and in part A of Annex VI to, the Water Framework Directive.”.

Amendment of Schedule 4 to Principal Regulations

9. Schedule 4 to the Principal Regulations is amended by inserting after Table 4 the following Table:

“Table 4A
Normative Definitions of ecological status classifications

For the purposes of Parts 1 to 4 the following shall apply:

- (a) Waters achieving a status below moderate shall be classified as poor or bad;
- (b) Waters showing evidence of major alterations to the values of the biological quality elements for the surface water body type and in which the relevant biological communities deviate substantially from those normally associated with the surface water body type under undisturbed conditions, shall be classified as poor.
- (c) Waters showing evidence of severe alterations to the values of the biological quality elements for the surface water body type and in which large portions of the relevant biological communities normally associated with the surface water body type under undisturbed conditions are absent, shall be classified as bad.

Part 1
Ecological Status in Rivers

‘benthic invertebrate fauna’, in the context of high, good or moderate status of biological quality elements, have the respective meanings given to them in Paragraph 1.2.1 of Annex V to the Water Framework Directive;

‘fish fauna’, in the context of high, good or moderate status of biological quality elements, have the respective meanings given to them in Paragraph 1.2.1 of Annex V to the Water Framework Directive;

‘general conditions’ in the context of high, good or moderate status of physico-chemical quality elements, have the respective meanings given to them in Paragraph 1.2.1 of Annex V to the Water Framework Directive;

‘hydrological regime’ in the context of high, good or moderate status of hydromorphological quality elements, have the respective meanings

given to them in Paragraph 1.2.1 of Annex V to the Water Framework Directive;

‘macrophytes and phytobenthos’, in the context of high, good or moderate status of biological quality elements, have the respective meanings given to them in Paragraph 1.2.1 of Annex V to the Water Framework Directive;

‘morphological conditions’ in the context of high, good or moderate status of hydromorphological quality elements, have the respective meanings given to them in Paragraph 1.2.1 of Annex V to the Water Framework Directive;

‘phytoplanton’, in the context of high, good or moderate status of biological quality elements, have the respective meanings given to them in Paragraph 1.2.1 of Annex V to the Water Framework Directive;

‘specific non-synthetic pollutants’ in the context of high, good or moderate status of physico-chemical quality elements, have the respective meanings given to them in Paragraph 1.2.1 of Annex V to the Water Framework Directive;

‘specific synthetic pollutants’ in the context of high, good or moderate status of physico-chemical quality elements, have the respective meanings given to them in Paragraph 1.2.1 of Annex V to the Water Framework Directive;

‘river continuity’ in the context of high, good or moderate status of hydromorphological quality elements, have the respective meanings given to them in Paragraph 1.2.1 of Annex V to the Water Framework Directive;

Part 2

Ecological Status in Lakes

‘benthic invertebrate fauna’, in the context of high, good or moderate status of biological quality elements, have the respective meanings given to them in Paragraph 1.2.2 of Annex V to the Water Framework Directive;

‘fish fauna’, in the context of high, good or moderate status of biological quality elements, have the respective meanings given to them in Paragraph 1.2.2 of Annex V to the Water Framework Directive;

‘general conditions’ in the context of high, good or moderate status of physico-chemical quality elements, have the respective meanings given to them in Paragraph 1.2.2 of Annex V to the Water Framework Directive;

‘hydrological regime’ in the context of high, good or moderate status of hydromorphological quality elements, have the respective meanings given to them in Paragraph 1.2.2 of Annex V to the Water Framework Directive;

‘morphological conditions’ in the context of high, good or moderate status of hydromorphological quality elements, have the respective meanings given to them in Paragraph 1.2.2 of Annex V to the Water Framework Directive;

‘macrophytes and phytobenthos’, in the context of high, good or moderate status of biological quality elements, have the respective meanings given to them in Paragraph 1.2.2 of Annex V to the Water Framework Directive;

‘phytoplanton’, in the context of high, good or moderate status of biological quality elements, have the respective meanings given to them in Paragraph 1.2.2 of Annex V to the Water Framework Directive;

‘specific non-synthetic pollutants’ in the context of high, good or moderate status of physico-chemical quality elements, have the respective meanings given to them in Paragraph 1.2.2 of Annex V to the Water Framework Directive;

‘specific synthetic pollutants’ in the context of high, good or moderate status of physico-chemical quality elements, have the respective meanings given to them in Paragraph 1.2.2 of Annex V to the Water Framework Directive;

Part 3
Ecological Status in Transitional waters

‘angiosperms’, in the context of high, good or moderate status of biological quality elements, have the respective meanings given to them in Paragraph 1.2.3 of Annex V to the Water Framework Directive;

‘benthic invertebrate fauna’, in the context of high, good or moderate status of biological quality elements, have the respective meanings given to them in Paragraph 1.2.3 of Annex V to the Water Framework Directive;

‘fish fauna’, in the context of high, good or moderate status of biological quality elements, have the respective meanings given to them in Paragraph 1.2.3 of Annex V to the Water Framework Directive;

‘general conditions’, in the context of high, good or moderate status of physico-chemical quality elements, have the respective meanings given to them in Paragraph 1.2.3 of Annex V to the Water Framework Directive;

‘macroalgae’, in the context of high, good or moderate status of biological quality elements, have the respective meanings given to them in Paragraph 1.2.3 of Annex V to the Water Framework Directive;

‘morphological conditions’, in the context of high, good or moderate status of hydromorphological quality elements, have the respective meanings given to them in Paragraph 1.2.3 of Annex V to the Water Framework Directive;

‘phytoplanton’, in the context of high, good or moderate status of biological quality elements, have the respective meanings given to them in Paragraph 1.2.3 of Annex V to the Water Framework Directive;

‘specific non-synthetic pollutants’, in the context of high, good or moderate status of physico-chemical quality elements, have the respective meanings given to them in Paragraph 1.2.3 of Annex V to the Water Framework Directive;

‘specific synthetic pollutants’, in the context of high, good or moderate status of physico-chemical quality elements, have the respective meanings given to them in Paragraph 1.2.3 of Annex V to the Water Framework Directive;

‘tidal regime’, in the context of high, good or moderate status of hydromorphological quality elements, have the respective meanings given to them in Paragraph 1.2.3 of Annex V to the Water Framework Directive;

Part 4 Ecological Status in Coastal waters

‘benthic invertebrate fauna’, in the context of high, good or moderate status of biological quality elements, have the respective meanings given to them in Paragraph 1.2.4 of Annex V to the Water Framework Directive;

‘general conditions’, in the context of high, good or moderate status of physico-chemical quality elements, have the respective meanings given to them in Paragraph 1.2.4 of Annex V to the Water Framework Directive;

‘macroalgae and angiosperms’, in the context of high, good or moderate status of biological quality elements, have the respective meanings given to them in Paragraph 1.2.4 of Annex V to the Water Framework Directive;

‘morphological conditions’, in the context of high, good or moderate status of hydromorphological quality elements, have the respective meanings given to them in Paragraph 1.2.4 of Annex V to the Water Framework Directive;

‘phytoplanton’, in the context of high, good or moderate status of biological quality elements, have the respective meanings given to them in Paragraph 1.2.4 of Annex V to the Water Framework Directive;

‘specific non-synthetic pollutants’, in the context of high, good or moderate status of physico-chemical quality elements, have the

respective meanings given to them in Paragraph 1.2.4 of Annex V to the Water Framework Directive;

‘specific synthetic pollutants’, in the context of high, good or moderate status of physico-chemical quality elements, have the respective meanings given to them in Paragraph 1.2.4 of Annex V to the Water Framework Directive;

‘tidal regime’, in the context of high, good or moderate status of hydromorphological quality elements, have the respective meanings given to them in Paragraph 1.2.4 of Annex V to the Water Framework Directive;

Part 5

Ecological Potential for Heavily Modified or Artificial Water Bodies

‘biological quality elements’, in the context of maximum, good or moderate potential for heavily modified or artificial water bodies, have the respective meanings given to them in Paragraph 1.2.5 of Annex V to the Water Framework Directive.

‘hydromorphological elements’, in the context of maximum, good or moderate potential for heavily modified or artificial water bodies, have the respective meanings given to them in Paragraph 1.2.5 of Annex V to the Water Framework Directive.

‘general conditions’, in the context of maximum, good or moderate potential for heavily modified or artificial water bodies, have the respective meanings given to them in Paragraph 1.2.5 of Annex V to the Water Framework Directive.

‘specific non-synthetic pollutants’, in the context of maximum, good or moderate potential for heavily modified or artificial water bodies, have the respective meanings given to them in Paragraph 1.2.5 of Annex V to the Water Framework Directive.

‘specific synthetic pollutants’, in the context of maximum, good or moderate potential for heavily modified or artificial water bodies, have the respective meanings given to them in Paragraph 1.2.5 of Annex V to the Water Framework Directive.”.



L.S.

GIVEN under my Official Seal,
15 June, 2022.

DARRAGH O'BRIEN,
Minister for Housing, Local Government and Heritage.

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