

Irish Statutory Instruments

S.I. No. 272/2009 - European Communities Environmental Objectives (Surface Waters) Regulations 2009

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S.I. No. 272 of 2009

EUROPEAN COMMUNITIES ENVIRONMENTAL OBJECTIVES (SURFACE WATERS) REGULATIONS 2009

Notice of the making of this Statutory Instrument was published in

"Iris Oifigiúil" of 24th July, 2009.

WHEREAS, I, JOHN GORMLEY, Minister for the Environment, Heritage and Local Government, in exercise of the powers conferred on me by section 3(3) of the European Communities Act 1972 (No. 27 of 1972) as inserted by section 2 of the European Communities Act 2007 (No. 18 of 2007), consider it necessary for the purpose of giving further effect to Directive 2006/11/EC 1 of the European Parliament and of the Council of 15 February 2006 on pollution caused by certain dangerous substances discharged into the aquatic environment of the Community, Directive 2000/60/EC 2 of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy, and Directive 2008/105/EC 3 of the European Parliament and of the Council of 16 December 2008 on environmental quality standards in the field of water policy, amending and subsequently repealing Directives 82/176/EEC, 83/513/EEC, 84/156/EEC, 84/491/EEC, 86/280/EEC and amending Directive 2000/60/EC 1 of the European Parliament and of the Council to make provision for offences under the following Regulations to be prosecuted on indictment:

AND WHEREAS, I consider that it is necessary, having regard to section 3(3) of the Act of 1972, and for the purpose of ensuring that penalties in respect of an offence prosecuted in that manner under the following Regulations are effective, proportionate and have a deterrent effect, having regard to the acts or omissions of which the offence consists, to make such provisions in the following Regulations:

NOW THEREFORE, I JOHN GORMLEY, Minister for the Environment, Heritage and Local Government, in exercise of the powers conferred on me by section 3 of the European Communities Act 1972 (No. 27 of 1972) as amended by the European Communities Act 2007 (S.I. No. 18 of 2007) and for the purpose of giving further effect to Directive 2006/11/EC 1 of the European Parliament and of the Council of 15 February 2006 on pollution caused by certain dangerous substances discharged into the aquatic environment of the Community, Directive 2000/60/EC 2 of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy, and Directive 2008/105/EC 3 of the European Parliament and of the Council of 16 December 2008 on environmental quality standards in the field of water policy, amending and subsequently repealing Directives 82/176/EEC, 83/513/EEC, 84/156/EEC, 84/491/EEC, 86/280/EEC and amending Directive 2000/60/EC 1 of the European Parliament and of the Council hereby make the following Regulations:

PART I PURPOSE AND INTERPRETATION

Citation and commencement

- 1. (1) These Regulations may be cited as the European Communities Environmental Objectives (Surface Waters) Regulations 2009.
 - (2) These Regulations shall come into operation on the 30th of July 2009.

Purpose and scope of the Regulations

- 2. These Regulations apply to all surface waters and are made to give effect to the measures needed to achieve the environmental objectives established for bodies of surface water by Directive 2000/60/EC of the European Parliament and of the Council, hereinafter known as the Water Framework Directive, including the environmental quality standards established by Directive 2008/105/EC of the European Parliament and of the Council and to give further effect to the requirements of Directive 2006/11/EC of the European Parliament and of the Council, hereinafter known as the Dangerous Substances Directive and include the following:
- (a) measures for the protection of surface water bodies whose status is determined to be high or good (or good potential as the case may be) and measures requiring the restoration of surface water bodies of less than good status (or good potential as the case may be) to not less than good status (or good potential) by not later than 22 December 2015;
- (b) measures establishing environmental quality standards for priority substances and certain other pollutants as provided for in Article 16 of the Water Framework Directive that are to apply in calculating the chemical status of bodies of surface water;
- (c) measures that provide for the progressive reduction of pollution by priority substances in accordance with the provisions of Article 4(1)(a)(iv) and Article 16(1) and (8) of the Water Framework Directive;
- (d) measures establishing a list of priority hazardous substances for which measures are to be put in place with the aim of ceasing or phasing out of emissions, discharges and losses

of these substances as provided for by Article 4(1)(a)(iv) and Article 16(1) and (8) of the Water Framework Directive;

- (e) measures establishing environmental quality standards for the pollutants listed in points 1 to 9 of Annex VIII of the Water Framework Directive that are to apply in calculating the ecological status or, where relevant, the ecological potential of bodies of surface water in accordance with the provisions and objectives of Article 4(1)(a)(ii) and 4(1)(a)(iii) of that Directive;
- (f) measures establishing environmental quality standards for the general conditions specified in Annex V of the Water Framework Directive that are to apply in calculating the ecological status or, where relevant, the ecological potential of bodies of surface water in accordance with the provisions and objectives of Article 4(1)(a)(ii) and 4(1)(a)(iii) of that Directive;
- (g) measures establishing the ecological quality ratios that represent the boundaries between high and good ecological status and between good and moderate ecological status for the biological quality elements specified in Annex V of the Water Framework Directive that are to apply in calculating the ecological status of bodies of surface water in accordance with the provisions and objectives of Article 4 of that Directive;
- (h) the laying down of rules for the presentation and reporting of surface water monitoring results and the classification of ecological status, ecological potential and the chemical status of surface water bodies in accordance with the requirements of Article 15, Annex V and Annex VII of the Water Framework Directive:
- (i) measures to prevent and reduce the pollution of waters by dangerous substances and give further effect to the requirements of Articles 6 and 9 of the Dangerous Substances Directive;
- (j) measures that provide for the establishment and operation of programmes in order to achieve the objectives established under Article 4(1) (a) of the Water Framework Directive including the reduction in pollution of waters by List II substances as required by Articles 6 and 9 of the Dangerous Substances Directive.

Interpretation

3. (1) In these Regulations, save where the context otherwise requires,—

"Act of 1972" means the European Communities Act of 1972 as amended by the European Communities Act 2007;

"Act of 1977" means the Local Government (Water Pollution) Act 1977 as amended by the Local Government (Water Pollution) (Amendment) Act 1990;

"Act of 1992" means the Environmental Protection Agency Act 1992 as amended by the Protection of the Environment Act 2003 and the Water Services Act 2007;

"Act of 1996" means the Waste Management Act 1996 as amended by the Waste Management (Amendment) Act 2001, Part 3 of the Protection of the Environment Act 2003

, Part 2 of the Waste Management (Electrical and Electronic Equipment) Regulations 2005 (S.I. No. 290 of 2005), Waste Management (Environmental Levy) (Plastic Bag) Order 2007 (S.I. No. 62 of 2007), Waste Management (Registration of Brokers and Dealers) Regulations 2008 (S.I. No. 113 of 2008) and the Waste Management (Certification of Historic Unlicensed Waste Disposal and Recovery Activity) Regulations 2008 (S.I. No. 524 of 2008);

"Act of 2000" means the Planning and Development Act 2000 (No. 30 of 2000) as amended;

"Agency" means the Environmental Protection Agency;

"artificial water body" means a body of surface water created by human activity;

"body of surface water" means a discrete and significant element of surface water such as a lake, reservoir, stream, river or canal, part of a stream, river or canal, a transitional water or a stretch of coastal water;

"coastal water" means surface water on the landward side of a line, every point of which is at a distance of one nautical mile on the seaward side from the nearest point of the baseline from which the breadth of territorial waters is measured, extending where appropriate up to the outer limit of transitional waters;

"co-ordinating local authority" has the same meaning as in the 2003 Regulations;

"Commission" means the Commission of the European Communities;

"Dangerous Substances Directive" means Directive 2006/11/EC of the European Parliament and of the Council of 15 February 2006 on pollution caused by certain dangerous substances discharged into the aquatic environment of the Community;

"Directive 2008/105/EC" means Directive 2008/105/EC of the European Parliament and of the Council of 16 December 2008 on environmental quality standards in the field of water policy, amending and subsequently repealing Council Directives 82/176/EEC, 83/513/EEC, 84/156/EEC, 86/280/EEC and amending Directive 2000/60/EC of the European Parliament and of the Council;

"Directive 91/414/EEC" means Council Directive 91/414/EEC of the European Parliament and of the Council of 15 July 1991 concerning the placing of plant protection products on the market;

"Directive 96/61/EC" means Council Directive 96/61/EC of the European Parliament and of the Council of 24 September 1996 concerning integrated pollution prevention and control as amended by Directives 2003/35/EC and 2003/87/EC, and Regulation 1882/2003/EC;

"ecological status" is an expression of the quality of the structure and functioning of aquatic ecosystems associated with surface waters, classified in accordance with the normative definitions of ecological status described in the Water Framework Directive;

"ecological quality ratio" is an expression of the relationship between the values of the biological parameters observed for a given body of surface water and the values for those parameters in the reference conditions applicable to that body and which pursuant to Directive 2000/60/EC of the European Parliament and of the Council, the Water Framework Directive, and Commission Decision 2008/915/EC of 30 October 2008, or any future amendment thereof, sets the values of a Member State's monitoring system classification as a result of the intercalibration exercise referred to in paragraph 1.4.1 Annex V of that Directive. The ratio is expressed as a numerical value between zero and one, with high ecological status represented by values close to one and bad ecological status by values close to zero;

"environmental pollution" means the direct or indirect introduction, as a result of human activity, of substances or heat into the air, water or land which may be harmful to human health or the quality of aquatic ecosystems or terrestrial ecosystems directly depending on aquatic ecosystems, or which result in damage to material property or which impair or interfere with amenities and other legitimate uses of the environment;

"European site" means—

- (a) a site (until the adoption, in respect of the site, of a decision by the European Commission under Article 21 of Council Directive 92/43/EEC for the purposes of the third paragraph of Article 4(2) of that Directive)—
- (i) notified for the purposes of Regulation 4 of the European Communities (Natural Habitats) Regulations (S.I. No. 94 of 1997), subject to any amendments made to it by virtue of Regulation 5 of those Regulations,
- (ii) details of which have been transmitted to the Commission in accordance with Regulation 5(4) of the said Regulations, or
- (iii) added by virtue of Regulation 6 of the said Regulations to the list transmitted to the Commission in accordance with Regulation 5(4) of those Regulations,
- (b) a site adopted by the European Commission as a site of Community importance for the purposes of Article 4(2) of Council Directive 92/43/EEC in accordance with the procedures laid down in Article 21 of that Directive,
- (c) a special area of conservation within the meaning of the European Communities (Natural Habitats) Regulations (S.I. No. 94 of 1997) or
 - (d) an area classified pursuant to Article 4(1) or 4(2) of Council Directive 79/409/EEC.

"good ecological potential" is the status of a body of surface water that is created by human activity or substantially changed in character as a result of physical alterations by human activity and so classified in accordance with the relevant provisions of Annex V of the Water Framework Directive;

"good surface water chemical status" means the chemical status required to meet the environmental quality standards for surface waters established by the Water Framework Directive and Directive 2008/105/EC on environmental quality standards in the field of

water policy; that is the chemical status achieved by a body of surface water in which the concentrations of priority substances and certain other pollutants do not exceed the environmental quality standards established in Schedule 6 of these Regulations;

"good surface water status" means the status achieved by a surface water body when both its ecological status and its chemical status are at least 'good';

"hazardous substance" means substances or groups of substances that are toxic, persistent and liable to bio-accumulate and other substances or groups of substances that give rise to an equivalent level of concern;

"heavily modified water body" means a body of surface water which as a result of physical alterations by human activity is substantially changed in character, and identified as such for the purpose of these Regulations;

"lake" means a body of standing inland surface water;

"Minister" means the Minister for the Environment, Heritage and Local Government unless otherwise indicated;

"pollutant" means any substance liable to cause pollution, and, for the purpose of this definition, 'substance' includes bacteria and other pathogens, where relevant, and the expression "polluting matter" shall be construed accordingly;

"priority hazardous substances" means those substances or groups of substances forming a subset of priority substances identified by the Commission in accordance with Article 16(3) of the Water Framework Directive and for which measures have to be taken to cease or phase-out discharges, losses and emissions and which are listed in Table 12 of Schedule 6 of these Regulations;

"priority substances" means those substances or groups of substances, identified by the Commission in accordance with Article 16(2) of the Water Framework Directive and listed in Tables 11 and 12 of Schedule 6 of these Regulations that have been prioritised for action by the setting of environmental quality standards at Community level;

"protected areas" means areas designated as requiring special protection under specific Community legislation for the protection of their surface water and groundwater or for the conservation of habitats and species of European sites directly dependent on water and listed in the register established by the Agency in accordance with Article 8 of the 2003 Regulations;

"public authority" means an authority or State Sponsored Body listed in Schedule 1 of these Regulations;

"Regulation (EC) No. 166/2006" means Regulation (EC) No. 166/2006 of the European Parliament and of the Council of 18 January 2006 concerning the establishment of a European Pollutant Release and Transfer Register and amending Council Directives 91/689/EEC and 96/61/EC;

"representative monitoring point" means a surface water monitoring point identified by the Agency in accordance with the requirements of Article 10 of the 2003 Regulations which is to be used to calculate the status of a body of surface water for the purpose of Part IV of these Regulations and which does not lie within the mixing zone of a point of discharge;

"river basin district" has the same meaning as in the 2003 Regulations;

"river basin district advisory council" means a council established in accordance with Article 16 of the 2003 Regulations;

"river basin management plan" means a plan, or updating of a plan, made in accordance with Article 13 of the 2003 Regulations;

"river" means a body of inland water flowing for the most part on the surface of the land but which may flow underground for part of its course;

"surface water" means inland waters (except groundwater), transitional waters and coastal waters, except in respect of chemical status for which it shall also include territorial waters;

"transitional waters" are bodies of surface water in the vicinity of river mouths which are partly saline in character as a result of their proximity to coastal waters but which are substantially influenced by freshwater flows;

"Water Framework Directive" means Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy;

"2003 Regulations" means the European Communities (Water Policy) Regulations 2003 (S.I. No. 722 of 2003) as amended;

"2009 Regulations" means the European Communities (Good Agricultural Practice for Protection of Waters) Regulations 2009 (S.I. No. 101 of 2009) or any future amendment thereto.

- (2) A word or expression that is used in these Regulations and is also used in Directive 2006/11/EC of the European Parliament and of the Council of 15 February 2006 on pollution caused by certain dangerous substances discharged into the aquatic environment of the Community, Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy and Directive 2008/105/EC of the European Parliament and of the Council of 16 December 2008 on environmental quality standards in the field of water policy, amending and subsequently repealing Directives 82/176/EEC, 83/513/EEC, 84/156/EEC, 84/491/EEC, 86/280/EEC and amending Directive 2000/60/EC of the European Parliament and of the Council has, unless the contrary intention appears, the same meaning in these Regulations as in the Directive concerned.
 - (3) In these Regulations, unless otherwise identified, a reference to—

- (a) a Part is a reference to a Part of these Regulations;
- (b) an Article is a reference to an Article of these Regulations;
- (c) a sub-article, paragraph or sub-paragraph is a reference to a sub-article, paragraph or sub-paragraph of the Article, sub-article or paragraph in which the reference occurs.

PART II DUTIES ON PUBLIC AUTHORITIES AND OTHER PERSONS

Duty on public authorities

- 4. A public authority that has functions the performance of which may affect the achievement of the environmental objectives established by these Regulations shall undertake those functions in a manner that will, as far as practicable, promote compliance with the requirements of these Regulations and, in particular shall—
 - (a) ensure, in so far as its functions allow, that—
- (i) surface water bodies comply with the relevant environmental quality standards specified in the Schedules contained in these Regulations, and
- (ii) protected areas achieve compliance with any standards and objectives laid down for such areas at the latest by 22 December 2015 unless otherwise specified in the national legislation under which the individual protected areas have been established.

Where one or more of the objectives or standards under this sub-paragraph relates to a given body of water, the most stringent shall apply

- (b) establish or make operational within the timeframes prescribed such measures appropriate to its functions as are necessary to achieve the environmental objectives and quality standards established, including the objective of progressively reducing pollution by priority substances and the ceasing or phasing out of emissions, discharges and losses of priority hazardous substances, and
- (c) consult, co-operate and liaise with other public authorities within the river basin district and, where appropriate with the relevant competent authorities in Northern Ireland, in such a manner and to such extent as is necessary to co-ordinate compliance with these Regulations.
- 5. A public authority shall not, in the performance of its functions, undertake those functions in a manner that knowingly causes or allows deterioration in the chemical status or ecological status (or ecological potential as the case may be) of a body of surface water.
- 6. In order to achieve the environmental objectives established by these Regulations, and without prejudice to the generality of Article 4 or Article 5, measures shall, taking account of the results of the analyses undertaken for the purpose of Article 7 of the 2003 Regulations, include the measures listed in Schedule 2.

Emission controls and environmental quality standards

- 7. Point source and diffuse source discharges liable to cause water pollution are prohibited except where subject to a system of prior authorisation or registration based on general binding rules. A public authority that authorises a discharge to waters shall lay down emission limits in the authorisation granted that satisfy the following requirements:
- (a) the emission limits shall establish the maximum concentration and the maximum quantity of a substance permissible in a discharge and shall aim to achieve the environmental objectives established in Part III of these Regulations including the environmental quality standards set out in Schedules 5 and 6 and any standards or objectives laid down for protected areas, and
- (b) discharges shall be controlled according to the combined approach whereby emission limits shall be established according to the stricter of the requirements which would result from the application of limits which aim to achieve the quality standards referred to in sub- paragraph (a) and, where relevant, the application of limits based on—
 - (i) emission controls based on best available techniques, or
 - (ii) relevant emission limit values, or
- (iii) in the case of diffuse impacts controls including, as appropriate, best environmental practices set out in:
- a specification prepared by the Agency in accordance with section 5 of the Environmental Protection Agency Act 1992 as amended by section 7 of the Protection of the Environment Act 2003 or
- the Urban Waste Water Treatment Regulations 2001 (S.I. No. 254 of 2001) as amended by the Urban Waste Water Treatment (Amendment) Regulations 2004 (S.I. No. 440 of 2004) or any future amendment thereof or
- the European Communities (Good Agricultural Practice for Protection of Waters) Regulations 2009 (S.I. No. 101 of 2009) or any future amendment thereof or
- the Local Government (Water Pollution) Act, 1977 (Control of Cadmium Discharges) Regulations 1985 (S.I. No. 294 of 1985) or
- the Local Government (Water Pollution) Act, 1977 (Control of Hexachlorocyclohexane and Mercury Discharges) Regulations 1986 (S.I. No. 55 of 1986) or
- the Local Government (Water Pollution) Acts, 1977 and 1990 (Control of Carbon Tetrachloride, DDT and Pentachlorophenol Discharges) Regulations 1994 (S.I. No. 43 of 1994) or
- measures or controls identified in a pollution reduction plan for the river basin district prepared in accordance with Part V of these Regulations for the reduction of pollution by priority substances or the ceasing or phasing out of emissions, discharges and losses of priority hazardous substances.

- 8. A person, public authority or body corporate authorised or otherwise regulated within the meaning of Article 7 shall comply within the timeframe specified, with the emission limits, or other requirements, laid down in the authorisation granted.
- 9. Requirements under Article 7 shall apply to all new authorisations to discharge into surface waters and to reviews of existing authorisations, granted under the Dumping at Sea Acts 1996-2004, the Foreshore Acts 1933-1992, the Fisheries Acts 1959-2003, the Act of 1977, the Act of 1992, the Act of 1996 and Regulations made for such purpose under the Act of 1972, or any other enactment, from the date of coming into force of these Regulations.
- 10. When authorising a discharge into a body of surface water, a public authority may decide to not apply emission limits based on the environmental quality standards set out in Schedules 5 and 6 of these Regulations where the said discharge or loss is made into waters covered by Article 30 or 31 of these Regulations and provided—
 - (1) the requirements of the said Articles are complied with in full, and
- (2) the reason or reasons for not applying the said emission limits are set out in the river basin management plan referred to in Article 13 of the 2003 Regulations, and
 - (3) the requirements of Article 34 of these Regulations are met.

Review of existing authorisations

- 11. (1) Notwithstanding any existing provisions of the Acts or Regulations referred to in Article 9, or any Regulation made to give effect to a requirement of the said Acts, a public authority shall as soon as may be practicable, but not later than 22 December 2012 and sooner if required or where directed by the Minister,
- (a) examine the terms of every authorisation or revised authorisation to which Article 9 applies and for the time being in force and determine whether, having regard to the requirements of Article 7 of these Regulations, the authorisation or revised authorisation requires to be reviewed for the purposes of compliance with the said Article, and
- (b) if the authorisation or revised authorisation requires to be so reviewed complete such a review by the required date, or
- (c) if the authorisation or revised authorisation does not require to be so reviewed and accordingly, that no further action is required, declare in writing that this is the case.
- (2) A public authority shall from time to time carry out such further examination, and where necessary review, of authorisations as may be necessary to ensure compliance with the environmental objectives and quality standards established by these Regulations.

Programmes to ensure the effectiveness of new and existing authorisations and programmes for the examination of farm installations and the control of farmyard pollution

12. (1) For the purpose of Article 11 of these Regulations and in order to reduce pollution of waters by dangerous substances and to give further effect to the requirements of

Articles 6 and 9 of the Dangerous Substances Directive, the Minister shall not later than 22 December 2009 prepare, or cause to have prepared—

- (a) programmes, including deadlines, for the examination and review, as appropriate, of authorisations under the Acts and Regulations referred to in Article 9. The programmes shall include measures to ensure compliance with the requirements of authorisations granted as well as measures for the identification and follow-up of unauthorised discharges;
- (b) programmes for the monitoring and inspection of farm installations to verify compliance with the prohibition on the discharge of substances liable to cause environmental pollution. The programmes shall include measures for follow-up action, including enforcement measures where relevant, in the event that non-compliance is detected. Programmes prepared for the purpose of the 2009 Regulations may be construed as programmes for the purposes of this sub-paragraph.
 - (2) A public authority shall comply with the programmes and deadlines so prepared.

Prosecution of offences and performance of statutory functions by public authorities

- 13. It shall be an offence not to comply with a requirement of these Regulations.
- 14. A person, public authority, body corporate or unincorporated body guilty of an offence is liable,
- (1) on summary conviction to a fine not exceeding €5,000 or to imprisonment for a term not exceeding 3 months or to both, or
- (2) on conviction on indictment to a fine not exceeding €500,000 or to imprisonment for a term not exceeding 3 years or to both.
- 15. Where an offence under these Regulations has been committed by a body corporate and is proved to have been committed with the consent or connivance or to be attributable to any neglect on the part of a person being a director, manager, secretary or other similar officer of the body corporate, or of a person who was purporting to act in any such capacity, that person as well as the body corporate is guilty of an offence and is liable to be proceeded against and punished as if that person was guilty of the first-mentioned offence.
- 16. Where the affairs of a body corporate or unincorporated body are managed by its members, Article 15 shall apply to the acts and defaults of a member in connection with that member's functions of management as if that member was a director or manager of the body.
- 17. A prosecution for an offence under these Regulations may be taken by a Minister of the Government, the Agency, the co-ordinating local authority for the river basin district, and, where appropriate, the relevant public authority. A prosecution for an offence may be taken by a local authority within the river basin district whether or not the offence is committed in the functional area of the authority.

Performance of functions and duties under these Regulations

- 18. Where the Minister, the Agency, the co-ordinating local authority for the river basin district, and, where appropriate, the relevant public authority, as appropriate, is of the opinion that a person, public authority or body corporate has failed to comply with a function or duty under these Regulations, or has performed that function or duty in an unsatisfactory manner, the co-ordinating local authority, the Agency, the Minister or the relevant public authority, as appropriate, may request a report within a specified period from the person, public authority or body corporate in relation to the matter and the person, public authority or body corporate shall comply with the request.
- 19. The co-ordinating local authority, the Agency, the Minister or the relevant public authority, as appropriate, having considered any report of the person, public authority or body corporate may, with a view to ensuring the satisfactory performance of the function or duty in question—
- (1) Issue such advice and recommendations to the person, public authority or body corporate as it considers necessary, or
- (2) Provide, on such terms and conditions as may be agreed, such assistance or support as the co-ordinating local authority, the Agency, the Minister or the relevant public authority considers, in consultation with the person, public authority or body corporate concerned, would be helpful.
- 20. Where the co-ordinating local authority for the river basin district, the Agency, the Minister or the relevant public authority is of the opinion that the response of the person, public authority or body corporate to advice or recommendations issued or assistance or support offered under Article 19 is inadequate for the purpose of complying with a duty or function under these Regulations it may, without prejudice to any powers under any other statute, direct the person, public authority or body corporate to carry out, cause to carry out, or arrange for, such action related to the function or duty in question as the co-ordinating local authority, the Agency, the Minister or the relevant public authority considers necessary within such period as may be specified.
- 21. Where a person, public authority or body corporate fails without reasonable cause to comply with a direction under Article 20, the co-ordinating local authority, the Agency, the Minister or the relevant public authority may carry out, cause to be carried out, or arrange for, such action related to the function or duty in question as it considers necessary to ensure compliance with the direction and the costs of such action may be recovered by the co-ordinating local authority, the Agency, the Minister or the relevant public authority, as appropriate, from the person, public authority or body corporate as a simple contract debt in any court of competent jurisdiction.

Application to the courts

22. Where, on application by a Minister of the Government, the co-ordinating local authority for the river basin district, the Agency or the relevant public authority to the District Court, the Circuit Court or the High Court, the Court is satisfied that a person, public authority or body corporate is not undertaking, or does not intend to undertake, its functions or duties under these Regulations in a manner consistent with the achievement of the environmental objectives established, or with a direction issued by the co-ordinating local authority, the Agency or the Minister under Article 20, the Court may by order—

- (1) Direct that person, body corporate or public authority to take such steps as are necessary to address the inconsistencies or other matters identified, and
- (2) Make such other provision, including provision in relation to the payment of costs, as the court considers appropriate.
- 23. An application for an order under Article 22 of these Regulations shall be by motion and the court, when considering the matter, may make such interim or interlocutory order as it considers appropriate.

Duty on the Environmental Protection Agency to classify waters

- 24. The Agency shall, by not later than 22 June 2011, classify in accordance with the requirements of these Regulations each surface water body identified for the purposes of Article 7 of the 2003 Regulations according to its ecological status, or its ecological potential as the case may be, and its chemical status.
- 25. The classification of the status for a surface water body shall be based on the results of the monitoring programmes prepared by the Agency in accordance with Article 10 of the 2003 Regulations and other relevant information, including monitoring and assessments undertaken in relation to associated protected areas.
 - 26. For the purpose of Articles 24 and 25, the Agency shall—
- (1) On completion of the classification, publish and make available all relevant monitoring data and information, including data and information on protected areas, used by the Agency to classify waters.
- (2) Provide a map for each river basin district illustrating the classification of the ecological status for each body of water colour-coded in accordance with Table 1 of Schedule 3 of these Regulations.
- (3) In respect of artificial and heavily modified water bodies, provide a map for each river basin district illustrating the classification of the ecological potential for each body of water colour-coded in accordance with Table 2 of Schedule 3 of these Regulations.
- (4) Indicate, by a black dot on the maps specified in sub-paragraphs (1) and (2) above, those bodies of water where failure to achieve good ecological status or good ecological potential is due to non-compliance with one or more of the environmental quality standards that have been established for relevant specific pollutants.
- (5) Provide a map for each river basin district illustrating the classification of chemical status for each body of water colour-coded in accordance with Table 3 of Schedule 3 of these Regulations.
- (6) Prepare the information specified in sub-paragraphs (2) to (5) in a form which is available for introduction into a geographical information system (GIS) and/or the geographical information system of the European Commission (GISCO).

Powers, duties and functions assigned to public authorities

27. The powers, duties and functions assigned to a public authority by these Regulations are additional to, and not in substitution for, the powers, duties and functions assigned by any other statute.

PART III ENVIRONMENTAL OBJECTIVES

Environmental objectives

- 28. The following environmental objectives are hereby established for surface waters—
- (1) A surface water body whose status is determined to be high or good (or good ecological potential and good surface water chemical status as the case may be) when classified by the Agency in accordance with these Regulations shall not deteriorate in status.
- (2) A surface water body whose status is determined to be less than good (or good ecological potential and good surface water chemical status as the case may be) when classified by the Agency in accordance with these Regulations shall be restored to at least good status (or good ecological potential and good surface water chemical status as the case may be) by not later than 22 December 2015 unless otherwise provided for by these Regulations.

Artificial and heavily modified water bodies

- 29. The environmental objective of good ecological potential and good chemical status may be applied in the case of a body of surface water identified by the co-ordinating local authority for the river basin district as artificial or heavily modified, when—
- (1) The changes to the hydromorphological characteristics of that body of water which would be necessary to achieve good ecological status would have significant adverse effects on:
 - (a) the wider environment;
 - (b) navigation, including port facilities or recreation;
- (c) activities for the purpose of which water is stored, such as drinking water supply, power generation or irrigation;
 - (d) water regulation, flood protection, land drainage, or
 - (e) other equally important sustainable human development activities.
- (2) The beneficial objectives served by the artificial or modified characteristics of the water body cannot, for reasons of technical feasibility or disproportionate costs, reasonably be achieved by other means which are a significantly better environmental option.
- (3) Such designation and the reasons for it shall be specifically mentioned in the river basin management plans required under Article 13 of the 2003 Regulations and reviewed every six years.

Extended deadlines

- 30. The deadline established under Article 28 (2) may be extended for the purpose of the phased achievement of the environmental objectives for bodies of water provided that no deterioration occurs in the status of the affected body of water and all of the following conditions are met—
- (1) It is demonstrated that the required improvements in status cannot reasonably be achieved within the timescales set out in Article 28 (2) for at least one of the following reasons:
- (a) the scale of improvements can only be achieved in phases exceeding the timescale for reasons of technical feasibility;
- (b) completing the improvements within the timescale would be disproportionately expensive;
- (c) natural conditions do not allow timely improvements in the status of the body of water.
- (2) Extension of the deadline, and the reasons for it, are set out and explained in the relevant river basin management plan prepared for the purposes of Article 13 of the 2003 Regulations.
- (3) Extensions shall be limited to a maximum of two further updates of the river basin management plan except in cases where the natural conditions are such that the objectives cannot be achieved within this period.
- (4) A summary of the measures envisaged as necessary to bring the bodies of water progressively to the required status by the extended deadline, the reasons for any significant delay in making these measures operational, and the expected timetable for their implementation are set out in the river basin management plan. A review of the implementation of these measures and a summary of any additional measures shall be included in updates of the river basin management plan.

Less stringent environmental objectives

- 31. Less stringent environmental objectives may be applied where a surface water body is so affected by human activity, as determined by the analysis of the characteristics of the river basin prepared for the purposes of Article 7 of the 2003 Regulations, or its natural condition is such that the achievement of the prescribed quality objectives would be infeasible or disproportionately expensive and the following conditions are met—
- (1) The environmental and socio-economic needs served by such human activity cannot be achieved by other means, which are a significantly better environmental option not entailing disproportionate costs.
- (2) The highest ecological and chemical status possible is achieved, given impacts that could not reasonably have been avoided due to the nature of the pollution.

- (3) No deterioration occurs in the status of the affected water body.
- (4) The establishment of less stringent environmental objectives, and the reasons for it, are specifically mentioned in the river basin management plan referred to in Article 13 of the 2003 Regulations, and those objectives are reviewed every six years.

Temporary deterioration in surface water status

- 32. Temporary deterioration in the status of bodies of surface water shall not result in failure to meet the environmental objectives set out in these Regulations provided the deterioration is the result of circumstances of natural cause or force majeure which are exceptional and could not reasonably have been foreseen, in particular extreme floods or prolonged droughts or the results of circumstances due to accidents which could not reasonably have been foreseen, provided all of the following conditions are met—
- (1) All practicable steps are taken to prevent further deterioration in status and to protect other water bodies not affected directly by the said circumstances.
- (2) The conditions under which circumstances that are exceptional or could not reasonably have been foreseen are documented in the river basin management plan.
- (3) The measures to be taken under such exceptional circumstances are included in the programme of measures and will not compromise the recovery of the quality of the body of water once the circumstances have ceased.
- (4) The effects of the circumstances are reviewed annually and subject to consideration of scale, technical feasibility, cost and natural conditions, all practicable measures are taken to restore the body of water to the status that obtained prior to the effects of those circumstances as soon as reasonably practicable.
- (5) A summary of the effects of the circumstances and of such measures taken or to be taken to restore the body of water to the status that obtained prior to the effects of those circumstances is included in the next update of the river basin management plan.

New physical modifications and new sustainable developments

- 33. Failure to achieve good ecological status, or where relevant, good ecological potential or to prevent deterioration in the status of a body of surface water resulting from new modifications or alterations to the physical characteristics of a surface water body, or failure to prevent deterioration of a body of surface water from high status to good status resulting from new sustainable human development activities shall not be a breach of these Regulations when all the following conditions are met:
- (1) All practicable steps are taken to mitigate the adverse impact on the status of the body of surface water.
- (2) The reasons for those modifications or alterations are specifically set out and explained in the river basin management plan required under Article 13 of the 2003 Regulations and the objectives are reviewed every six years.

- (3) The reasons for those modifications or alterations are of overriding public interest and/or the benefits to the environment and to society of achieving the objectives established by Article 28 of these Regulations are outweighed by the benefits of the new modifications or alterations to human health, to the maintenance of human safety or to sustainable development, and
- (4) The beneficial objectives served by these modifications or alterations of the water body cannot for reasons of technical feasibility or disproportionate cost be achieved by other means, which are a significantly better environmental option.

Application of exemption provisions

- 34. Application of the exemption provisions referred to in Articles 29, 30, 31, 32 and 33 must ensure that—
- (1) Achievement of the environmental objectives is not permanently excluded or compromised in other bodies of water within the same river basin district and measures taken are consistent with the implementation of other Community environmental legislation.
- (2) The same level of protection as is afforded by existing Community legislation is guaranteed.
- (3) The said exemption provisions are applied on a quality element-by-quality element basis and measures are implemented that aim to achieve the highest ecological and chemical state possible in relation to any individual body of water.

PART IV THE CALCULATION OF ECOLOGICAL STATUS, ECOLOGICAL POTENTIAL AND CHEMICAL STATUS

The calculation of ecological status and ecological potential

- 35. The ecological status, or ecological potential, of a body of surface water shall be assigned by the Agency and shall be based on the results of the monitoring systems established for the relevant biological quality elements, expressed as ecological quality ratios, the monitoring results for the general quality elements and specific pollutants supporting the biological quality elements, and where relevant for classification purposes, the monitoring results for the hydromorphological quality elements.
- 36. The ecological status of a body of surface water shall be represented by the lower of the quality element values for the biological and the physico-chemical status calculated for each relevant quality element, except for the purpose of assigning high status in which case ecological status shall be determined by the lowest of the status values obtained for the biological, the physico-chemical and hydromorphological quality elements.
 - 37. Ecological status shall be calculated as follows—
- (1) A body of surface water for which the calculated ecological quality ratio values for the biological quality elements show no or only very minor evidence of distortion from undisturbed or reference conditions, and where there are only very minor anthropogenic alterations to the status of the hydromorphological quality elements and where the values for

the biological and physico-chemical quality elements satisfy the relevant criteria established in Schedule 5 of these Regulations, shall be classified as being of high ecological status.

- (2) A body of surface water for which the calculated ecological quality ratio values for the biological quality elements show low levels of distortion and deviate only slightly from undisturbed or reference conditions and where the values for the biological and the physicochemical quality elements satisfy the relevant criteria established in Schedule 5 of these Regulations, shall be classified as being of good ecological status.
- (3) A body of surface water for which the calculated ecological quality ratio values for the biological quality elements deviate moderately from undisturbed or reference conditions or where the values for the physico-chemical quality elements fail to satisfy the relevant criteria for good status established in Schedule 5 of these Regulations, shall be classified as being of moderate ecological status.
- (4) For the purpose of calculating the condition of a biological quality element the Agency may, in order to improve confidence in the assessment, combine a number of parameters that are indicative of that quality element, for example by averaging their status, expressed as environmental quality ratio values for the purpose of assessing the effects of a particular pressure. Biological parameters that are sensitive to different pressures may not be so combined unless these parameters are also considered independently as part of the overall assessment of ecological quality.
- 38. A body of surface water achieving a status less than moderate shall be classified as either poor or bad—
- (1) A body of surface water showing evidence of major alterations to the ecological quality ratio 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 or reference conditions, shall be classified as being of poor ecological status.
- (2) A body of surface water showing evidence of severe alterations to the ecological quality ratio 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 or reference conditions are absent, shall be classified as being of bad ecological status.
- 39. When assigning ecological status to a body of surface water, the Agency shall be satisfied that the values of the general physico-chemical quality elements for that body of water are consistent with the achievement of the ecological quality ratio values specified for the biological quality elements. In this regard, and to avoid misclassification of waters, the Agency shall—
- (1) Establish the permitted statistically based range within which the general physicochemical quality elements may deviate from the values specified in Schedule 5 in order to ensure ecological relevance and so as to avoid a mismatch between the monitoring results for the biological and the general physico-chemical quality elements.

- (2) Arrange for the statistical basis for the range or ranges thus established to be published and made available for public comment not less than three months in advance of classifying the ecological status of waters as required by Article 24.
- 40. In order for a body of surface water to be classified as being of high or good ecological status, the concentration of specific pollutants at any representative monitoring point within the body of water shall not exceed the environmental quality standards set out in Table 10 of Schedule 5.

The calculation of chemical status

- 41. The chemical status of a body of surface water shall be assigned by the Agency according to the monitoring results for the chemical substances and their environmental quality standards established in Schedule 6 of these Regulations—
- (1) For any given surface water body, compliance with the annual average environmental quality standard means that the arithmetic mean of the concentrations measured during the twelve month monitoring period does not exceed any of the AA-EQS standards established in Tables 11 and 12 of Schedule 6 at any representative monitoring point within the water body, and
- (2) For any given surface water body, compliance with the maximum allowable concentration means that the measured concentration does not exceed any of the MAC-EQS standards established in Tables 11 and 12 of Schedule 6 at any representative monitoring point within the water body.
- (3) The Agency may introduce statistical methods, such as a percentile calculation, to ensure an acceptable level of confidence and precision for determining compliance with the maximum allowable concentration (MAC-EQS). If the Agency does so, such statistical methods shall comply with detailed rules laid down in accordance with the procedure referred to in Article 21(2) of the Water Framework Directive.

Metals

- 42. The Agency may, when assessing the monitoring results, take into account—
- (1) Natural background concentrations for metals and their compounds if they prevent compliance with the environmental quality standard established.
- (2) Hardness, pH or other water quality parameters that affect the bioavailability of metals.

The identification of progressive and sustained upward trends

43. The Agency shall, when assessing the monitoring results for the calculation of ecological status and chemical status, identify marked and sustained upward trends in the concentration of pollutants, groups of pollutants or indicators of pollution found in bodies or groups of bodies of surface water, including within-status trends, that would likely result in deterioration in status over time or give rise to non-compliance with a standard or objective established for an individual protected area. The Agency shall cause such bodies or groups

of surface water bodies to be identified in river basin management plans and, where appropriate, issue advice to the public authority or authorities concerned on the measures to be taken to address the upward trend identified.

Knowledge gaps in classification systems

- 44. The Agency shall take all necessary steps to ensure that the quality elements and class boundaries used to calculate surface water status are as complete and up-to-date as possible and consistent with the normative definition of ecological status classification set out in section 1.2 of Annex V of the Water Framework Directive. In particular—
- (1) Having regard to the fact that it has not been possible to complete the intercalibration exercise referred to in section 1.4.1 of Annex V of the Directive and, as a result, it has not been possible to set boundaries at quality element level for national classification methods for all the biological quality elements referred to in section 1.2 of Annex V of the Directive, the Agency shall—
- (a) identify those biological quality elements listed in section 1.2 of Annex V of the Directive for which ecological quality ratios have not been, or have only partly been, established by these Regulations, and
- (b) having regard to the need also for the further development of this work at EU level, prepare and publish a work programme, including timelines, for the completion of outstanding work as soon as may be practicable

and

- (2) having regard to the ongoing development of work under this Article and the collection and examination of monitoring data as part of the ongoing programmes established for the purpose of Article 10 of the 2003 Regulations, the Agency shall—
- (a) keep under review the list of specific pollutants established in Table 10 of Schedule 5 and the boundary conditions and environmental quality standards established for the general supporting conditions and specific pollutants listed in Tables 9 and 10 of Schedule 5, and
- (b) from time to time, as appropriate and necessary, publish and make recommendations to the Minister on the changes and/or additions to be made to the lists and standards established.
- 45. The Minister shall, if appropriate, on receipt of a recommendation or recommendations from the Agency arising from a requirement under Article 44 of these Regulations, undertake consultation on the recommendation or recommendations made by the Agency and shall, as soon as may be practicable, amend these Regulations having regard to the advice given to him by the Agency and any representation made by a Minister of Government or any other person or body.

Interim classification of surface water bodies for the first river basin planning cycle

- 46. For the purpose of the first river basin management plan, and pending full classification of surface water bodies in accordance with the requirements of Articles 24 to 26 and Articles 35 to 42 of these Regulations, the Agency shall assign an interim classification of overall status to each body of surface water where the Agency is satisfied that it can reliably do so on the basis of available information and/or expert knowledge. The Agency shall—
- (1) as a minimum assign a status of 'high', 'good' or 'less than good' to those bodies of surface water where available data and knowledge allows, and
- (2) assign 'undetermined status' to those remaining bodies of water where the Agency is not, by that date, in a position to assign a reliable interim classification due to a lack of data or other reason, and
- (3) periodically review the interim classifications and add to the list of bodies of water so classified as data availability and knowledge improves.
- 47. In assigning interim status, the Agency shall have regard to all relevant data relating to the body of water in question, including the results of monitoring, the results of analyses undertaken for the purpose of Article 7 of the 2003 Regulations as well as monitoring and assessments undertaken in relation to associated protected areas.
- 48. The interim classification of status assigned by the Agency in accordance with Articles 46 and 47 shall be a classification of status as if assigned by the Agency in accordance with the procedures set out in Articles 35 to 42 and shall be deemed as such for the purpose of these Regulations.

Protected Areas

- 49. For the purpose of calculating the ecological status of a body of surface water in accordance with Part IV of these Regulations, the Agency shall, in the case of those surface water bodies which are also protected areas requiring special protection by virtue of standards or objectives arising from specific Community legislation for the protection of water or for the conservation of habitats and species directly dependent on water at European sites, assign a status of less than good ecological status where the standards or objectives for the protected area are not met arising from a failure to meet the required water quality or hydrological standards. Where appropriate, the use of additional site specific biological, microbiological or chemical indicators will be used.
- 50. A body of surface water classified as less than good ecological status in accordance with the requirements of Article 49 of these Regulations shall be so identified by the Agency. The Agency shall set out in accordance with the requirements of Article 26(1) the reason or reasons for the classification so assigned.

Mixing zones

51. Where a body of surface water exceeds the relevant environmental quality standards listed in Tables 9, 10, 11 and 12 of Schedules 5 and 6 for one or more pollutants within a mixing zone adjacent to a point of discharge and where the mixing zone has been expressly provided for in the authorisation allowing the discharge, that water body shall not be in

breach of the prescribed environmental quality standard for classification purposes, provided—

- (1) the extent of any such zone is restricted to the proximity of the point of discharge; and
- (2) the extent of any such zone is proportionate having regard to the concentration of pollutants at the point of discharge, to the emission limits established in the authorisation granted and in particular to the application of emission controls based on best available techniques, including application of the combined approach set out in Article 7 of these Regulations; and
- (3) the procedures and methodologies used to delineate such zones, including measures to be taken to reduce the extent of such zones in the future, are described in river basin management plans made in accordance with Article 13 of the 2003 Regulations; and
- (4) compliance with the prescribed environmental quality standards is not compromised in relation to the remainder of the water body, and
- (5) the delineation of mixing zones is undertaken in accordance with any technical guidelines that may be adopted in accordance with the procedure referred to in Article 21(2) of the Water Framework Directive.

PART V DUTY TO PREPARE INVENTORIES OF EMISSIONS, DISCHARGES AND LOSSES OF PRIORITY AND PRIORITY HAZARDOUS SUBSTANCES AND POLLUTION REDUCTION PLANS

Inventory of emissions, discharges and losses

- 52. The Agency, in consultation with the co-ordinating local authority for each river basin district, or part of a river basin district lying within the State, shall establish, or cause to be established for each river basin district or part thereof as appropriate, an inventory of emissions, discharges and losses of priority and priority hazardous substances and other pollutants listed in Tables 11 and 12 of Schedule 6 of these Regulations.
- 53. For the purpose of Article 52, the Agency may direct a public authority to put in place the necessary arrangements for the collection and transmission to it of specified data, within a prescribed timeframe, in a manner to be determined by the Agency. A public authority so directed shall deliver the required data to the Agency within the timeframe and in the manner prescribed.
- 54. The Agency shall, having regard to any technical guidelines for the establishment of inventories adopted in accordance with the procedure referred to in Article 21(2) of the Water Framework Directive, prepare guidance on the data to be collected for the purpose of establishing the inventory which shall address, in particular, details on the following—
 - (1) reporting procedures;
 - (2) the data to be reported;

- (3) quality assurance and assessment;
- (4) indication of type of withheld data and reasons why they were withheld in the case of confidential data;
- (5) reference to internationally approved release determination and analytical methods and sampling methodologies;
 - (6) indication of parent companies; and
- (7) where relevant, coding of activities according to Annex I of Regulation (EC) No. 166/2006 and to Directive 96/61/EC.
- 55. The Agency shall determine the reference period for the estimation of pollutant values to be entered into the inventories referred to in Article 52 which shall be one year between 2008 and 2010 (inclusive), except in the case of pollutants covered by Directive 91/414/EEC where entries may be calculated as the average of the years 2008, 2009 and 2010.
- 56. The Agency shall for the first time, by not later than 22 June 2011 publish and send to the Minister, each co-ordinating local authority and to the advisory council for each river basin district a summary of the inventories established, including the respective reference periods. The Agency shall thereafter update the inventories as part of the reviews of analyses specified in Article 7 of the 2003 Regulations. The reference period for the establishment of values in the updated inventories shall be the year before that analysis is to be completed. For priority substances or pollutants covered by Directive 91/414/EEC, the entries may be calculated as the average of the three years before the completion of that analysis. Updated inventories shall be published and included in updated river basin management plans made under Article 13 of the 2003 Regulations.

Monitoring of sediments and biota

- 57. The Agency shall, in relation to those priority and priority hazardous substances that tend to accumulate in sediment and/or biota, arrange or cause to have arranged, for the monitoring and long-term trend analysis of the concentrations of the said substances in sediment and/or biota at representative locations deemed appropriate by the Agency. In determining the substances and locations to be so monitored, the Agency shall have regard to the findings of the monitoring programmes prepared under Article 10 of the 2003 Regulations, other relevant information such as the results of analyses undertaken for the purpose of Article 7 of the 2003 Regulations as well as information arising from the preparation of the inventories referred to in Article 52 of these Regulations. The Agency shall determine the extent of locations to be monitored and the manner and frequency of monitoring so as to provide sufficient data for reliable long-term trend analysis. As a general rule, monitoring shall take place every three years unless the Agency determines another interval on the basis of technical knowledge or expert judgement.
- 58. The Agency shall decide how the work is to be arranged and for this purpose may direct a public authority or public authorities listed in these Regulations to undertake the monitoring determined by the Agency for the purposes of Article 57. A public authority so

directed shall undertake the monitoring within the frequency specified and in the manner prescribed.

Duty on a co-ordinating local authority for a river basin district to make a pollution reduction plan

- 59. The co-ordinating local authority for each river basin district, in consultation with the Agency and with relevant public authorities in the river basin district shall, for the first time as soon as may be after the completion of the inventory of discharges, losses and emissions referred to in Article 52, and by not later than 22 June 2012 prepare, or cause to have prepared, a plan, including a timetable, for the progressive reduction of pollution by priority substances and the ceasing or phasing out of emissions, discharges and losses of priority hazardous substances.
- 60. The pollution reduction plan shall have regard to the inventory of emissions, discharges and losses prepared by the Agency for the purposes of Article 52, the results of analyses undertaken for the purpose of Article 7 of the 2003 Regulations, the findings of the monitoring programmes prepared under Article 10 of the 2003 Regulations and any other information, including technical considerations, that the co-ordinating local authority considers relevant.
 - 61. The pollution reduction plan shall—
- (1) Describe all significant emissions, discharges and losses of priority and priority hazardous substances within the river basin district as a result of human activities; existing controls or abatement measures with reference to the key activities or sectors giving rise to these losses, emissions or discharges; the relative importance and magnitude of these losses with regard to the environmental objectives established; and, the likely position with respect to each of these matters for such period after the making, or review and implementation of a pollution reduction plan for priority substances, as the co-ordinating local authority considers appropriate.
- (2) Specify objectives, and where appropriate, targets and deadlines for the prevention and reduction of losses of priority and priority hazardous substances which in the opinion of the co-ordinating local authority for the river basin district are necessary, appropriate or desirable, and over such periods as the co-ordinating local authority may consider necessary;
- (3) Provide for, as appropriate, the identification of particular measures either in relation to individual priority and priority hazardous substances or to particular sectors or activities, or a combination of both, to prevent and limit environmental pollution by priority substances and to provide for the progressive reduction of pollution and the ceasing or phasing out of emissions, discharges and losses of priority hazardous substances.
- (4) Have regard to the need to give effect to the polluter pays principle, the use of economic measures in meeting the targets, the relative cost-effectiveness of the measures proposed and the likely economic impact of the proposed measures on key economic and social sectors.

- (5) Make recommendations, on the reduction of pollution by priority and priority hazardous substances, regarding—
 - (a) Priorities, measures and reduction targets and deadlines which could be pursued.
- (b) The functions of any relevant public authorities in achieving the targets, priorities and measures proposed.
- 62. The plan shall be updated and included as part of future river basin management plans made under Article 13 of the 2003 Regulations.
- 63. The co-ordinating local authority for the river basin district shall publish and send to the Minister, the Agency, relevant public authorities and to the advisory council for the river basin district a summary of the pollution reduction plan or revised plan.
- 64. The co-ordinating local authority and other public authorities with functions within the river basin district shall have regard to the findings and recommendations of the pollution reduction plan or revised plan in the design and implementation of measures to achieve the objectives of these Regulations.

Power of the Minister in relation to pollution reduction plans

- 65. The Minister shall determine the necessary arrangements and structures to promote co-ordination across and within river basin districts, including where appropriate co-ordination with the relevant authorities in Northern Ireland, in relation to the preparation of the inventories and pollution reduction plans referred to in Articles 52 and 59 of these Regulations.
- 66. The Minister may, after consultation with any Minister of Government, the Environmental Protection Agency, the Health and Safety Authority and the local authorities concerned require that—
- (1) Two or more co-ordinating local authorities jointly prepare a pollution reduction plan,
- (2) The preparation of a pollution reduction plan by two or more co-ordinating local authorities be co-ordinated in such a manner and in relation to such matters as the Minister may specify, and
- (3) Require a co-ordinating local authority or, as the case may be, two or more coordinating local authorities, to vary (whether by addition or deletion) a pollution reduction plan prepared by it or them in such manner as the Minister may specify or to replace the plan by a new pollution reduction plan, and the co-ordinating local authority or authorities shall comply with any such requirement by the Minister.
- 67. The Minister may, or the Environmental Protection Agency shall if required to do so by the Minister, give directions prescribing the manner in which any matter is to be set out or addressed in a pollution reduction plan.

68. Article 66 sub-paragraph (3) and Article 67 shall not be construed as enabling the Minister to exercise any power or control in relation to the performance in particular circumstances by a co-ordinating local authority or other public authority of its statutory functions in a way that is contrary to its obligations under that function or functions.

PART VI MISCELLANEOUS PROVISIONS

Miscellaneous and transitional provisions

- 69. The application of measures taken pursuant to these Regulations shall on no account lead, either directly or indirectly, to increased pollution of surface waters.
- 70. The Local Government (Water Pollution) Act 1977 (Water Quality Standards for Phosphorus) Regulations 1998 (S.I. No. 258 of 1998) and the Water Quality (Dangerous Substances) Regulations 2001 (S.I. No. 12 of 2001) are hereby revoked.

SCHEDULE 1 RELEVANT PUBLIC AUTHORITIES

The public authorities to which these Regulations apply are—

The Environmental Protection Agency

The relevant local authorities

The regional authorities in the area

The regional fisheries boards in the area

The National Roads Authority

The Radiological Protection Institute of Ireland

The Marine Institute

The Central Fisheries Board

The Electricity Supply Board

The Commission for Energy Regulation

Port and Harbour Authorities including Port companies established under the 1996 Harbours Act

The Dublin Docklands Development Authority

Waterways Ireland

An Bord Pleanála

Bord Iascaigh Mhara

Bord Na Mna

Coillte

The Health and Safety Authority

The Commissioners of Public Works

The Minister for Enterprise, Trade and Employment

The Minister for Communications, Energy and Natural Resources

The Minister for Agriculture, Fisheries and Food

The Minister for the Environment, Heritage and Local Government

The Minister for Transport

SCHEDULE 2 MEASURES FOR THE PURPOSE OF THESE REGULATIONS

- 1. Measures required to implement Community legislation for the protection of surface water.
- 2. Measures in accordance with national policy for the recovery of the costs of water services for the purposes of Article 9 of the Water Framework Directive.
- 3. Measures to promote an efficient and sustainable water use in order to avoid compromising the achievement of the environmental objectives established by these Regulations.
- 4. Measures to meet the requirements of Article 7 of the Water Framework Directive, including measures to safeguard water quality in order to reduce the level of purification treatment required for the production of drinking water.
- 5. Measures to control the abstraction and the impoundment of fresh surface water, including a register or registers of water abstractions and a requirement of prior authorisation for abstraction and impoundment. Abstractions or impoundments that have no significant impact on water status can be exempted from these controls.
- 6. For point source discharges liable to cause pollution, a requirement for prior regulation, such as a prohibition on the entry of pollutants into water, or for prior authorisation, or registration based on general binding rules, laying down emission controls for the pollutants concerned, including controls in accordance with the combined approach as outlined in Article 10 of the Water Framework Directive.
- 7. For diffuse sources liable to cause water pollution, measures to prevent or control the input of pollutants to water. Controls may take the form of a requirement for prior regulation, such as a prohibition on the entry of pollutants into water, prior authorisation or registration based on general binding rules where a requirement is not otherwise provided for under Community legislation.

- 8. For any other significant adverse impacts on the status of surface water identified during the review carried out for the purpose of Article 7 of the 2003 Regulations, in particular measures to ensure that the hydromorphological conditions of bodies of water are consistent with the achievement of the required ecological status, or good ecological potential for bodies of water designated as artificial or heavily modified. Controls for this purpose may take the form of a requirement for prior authorisation or registration based on general binding rules where such a requirement is not otherwise provided for under Community legislation.
- 9. Measures to eliminate pollution of surface waters by priority substances and to progressively reduce pollution by other substances which would otherwise prevent achievement of the environmental objectives established by these Regulations for bodies of surface water.
- 10. Measures required to prevent significant losses of pollutants from technical installations and to prevent and/or reduce the impact of accidental pollution incidents, for example, as a result of floods, including through systems to detect or give warning of such events including, in the case of accidents which could not reasonably have been foreseen, all appropriate measures to reduce the risk to aquatic ecosystems.
- 11. Measures in addition to any of the above that are specifically designed and implemented with the aim of achieving the environmental objectives and quality standards established by these Regulations.

SCHEDULE 3 THE PRESENTATION OF MONITORING RESULTS AND SURFACE WATER CLASSIFICATION

Table 1

Ecological Status

Ecological status classification Colour code

High Blue

Good Green

Moderate Yellow

Poor Orange

Bad Red

Table 2

Ecological Potential

Artificial water bodies Heavily modified

Good and above Equal green and light grey stripes Equal green and dark grey stripes

Moderate Equal yellow and light grey stripes Equal yellow and dark grey

stripes

Poor Equal orange and light grey stripes Equal orange and dark grey

stripes

Bad Equal red and light grey stripes Equal red and dark grey stripes

Table 3

Chemical Status

Chemical status classification

Colour code

Good Blue

Failing to achieve good Red

SCHEDULE 4 THE CLASSIFICATION OF ECOLOGICAL STATUS FOR RIVERS, LAKES, TRANSITIONAL WATERS AND COASTAL WATERS

Table 4

The general definition of high, good and moderate ecological status (1) (2)

- (1) Surface waters achieving a status below moderate shall be classified as poor or bad
- (2) The text in Table 4 provides a general definition only of ecological quality. For the purpose of classifying surface water ecological satus, regard must be had, as appropriate, to the biological, hydromorphological and supporting physico-chemical quality elements listed in tables 5, 6 and 7 of this Schedule and to the boundary conditions established in Tables 8, 9 and 10 of Schedule 5.

High status There are no, or only very minor, anthropogenic alterations to the values of the physico-chemical and hydromorphological quality elements for the surface water body type from those normally associated with that type under undisturbed conditions. The values of the biological quality elements for the surface water body reflect those normally associated with that type under undisturbed conditions, and show no, or only very minor, evidence of distortion.

Good status The values of the biological quality elements for the surface water body type show low levels of distortion resulting from human activity, but deviate only slightly from those normally associated with the surface water body type under undisturbed conditions.

Moderate status The values of the biological quality elements for the surface water body type deviate moderately from those normally associated with the surface water body type under undisturbed conditions. The values show moderate signs of distortion resulting from human activity and are significantly more disturbed than under conditions of good status.

Table 5

The biological quality elements that may be used when calculating ecological status

Surface water category Biological quality element

River water body Composition and abundance of aquatic floraComposition and abundance of benthic invertebrate faunaComposition, abundance and age structure of fish fauna

Lake water body Composition, abundance and biomass of phytoplanktonComposition and abundance of other aquatic floraComposition and abundance of benthic invertebrate faunaComposition, abundance and age structure of fish fauna

Transitional water body Composition, abundance and biomass of phytoplanktonComposition and abundance of other aquatic floraComposition and abundance of benthic invertebrate faunaComposition and abundance of fish fauna

Coastal water body Composition, abundance and biomass of phytoplanktonComposition and abundance of other aquatic floraComposition and abundance of benthic invertebrate fauna

Table 6

The hydromorphological quality elements supporting the biological quality elements

Surface water category Hydromorphological

quality element Description

River water body Hydrological regime Quantity and dynamics of water flowConnection to groundwater bodies

River continuity

Morphological conditions River depth and width variationStructure and substrate of the river bedStructure of the riparian zone

Lake water body Hydrological regime Quantity and dynamics of water flowResidence timeConnection to the groundwater body

Morphological conditions Lake depth variationQuantity, structure and substrate of the lake bedStructure of the lake shore

Transitional water body Morphological conditions Depth variationQuantity, structure and substrate of the bedStructure of the intertidal zone

Tidal regime Freshwater flowWave exposure

Coastal water body Morphological conditions Depth variationStructure and substrate of the coastal bedStructure of the intertidal zone

Tidal regime Direction of dominant currentsWave exposure

Table 7

The physico-chemical quality elements supporting the biological elements to be taken into account when calculating ecological status

Surface water category Physico-chemical quality element

River water body General conditions Thermal conditions, oxygenation conditions, salinity, acidification status and nutrient conditions

Specific pollutants Pollution by synthetic or non synthetic substances listed in Table 10 of Schedule 5 of these Regulations, not being for the time being identified as priority substances, which are discharged in significant quantities into the body of water

Lake water body General conditions Transparency, thermal conditions, oxygenation conditions, salinity, acidification subtatus and nutrient conditions

Specific pollutants Pollution by synthetic or non synthetic substances listed in Table 10 of Schedule 5 of these Regulations, not being for the time being identified as priority substances, which are discharged in significant quantities into the body of water

Transitional water body General conditions Transparency, thermal conditions, oxygenation conditions, salinity and nutrient conditions

Specific pollutants Pollution by synthetic or non synthetic substances listed in Table 10 of Schedule 5 of these Regulations, not being for the time being identified as priority substances, which are discharged in significant quantities into the body of water

Coastal water body General conditions Transparency, thermal conditions, oxygenation conditions, salinity and nutrient conditions

Specific pollutants Pollution by synthetic or non synthetic substances listed in Table 10 of Schedule 5 of these Regulations, not being for the time being identified as priority substances, which are discharged in significant quantities into the body of water

SCHEDULE 5 CRITERIA FOR CALCULATING SURFACE WATER ECOLOGICAL STATUS AND ECOLOGICAL POTENTIAL

Table 8 — Biological quality elements

RIVERS (All types)

Ecological quality ratio

Biological quality element Classification system High - good boundary
Good - moderate boundary

Benthic invertebrate fauna Quality rating system (Q - value) 0.85 0.75

Phytobenthos Trophic diatom index (TDI) 0.93 0.78

LAKES

Biological quality element Classification system Lake type

(1) Ecological quality ratio Chlorophyll a (g/l)

High - good boundary Good - moderate boundary

High - good Good - moderate

Plast relative (2) (Chlorophyll a) Lake type 4 - 0.5

Phytoplankton (2) Phytoplankton biomass (3) (Chlorophyll a) Lake type 4 0.50 6 9

Lake types 7, 8, 11 and 12 0.55 0.32 5.8 10

Macrophytes Lake macrophytes All types 0.90 0.68

- (1) Type 4: Low alkalinity (<20 mg/1 CaCO 3), deep (>4m) and large (<50 ha) Type 7: Moderate alkalinity (20-100 mg/1 CaCO 3), deep (>4m) and small (<50 ha) Type 8: Moderate alkalinity (20-100 mg/1 CaCO 3), deep (>4m) and large (>50 ha) Type 11: High alkalinity (>100 mg/1 CaCO 3), deep (>4m) and small (<50 ha) Type 12: High alkalinity (>100 mg/1 CaCO 3), deep (>4m) and large (>50 ha)
- (2) 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.

(3) 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.

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

Phytoplankton High - good Good - moderate Chlorophyll (g/l) (1)

Phytoplankton biomass (Chlorophyll) 0.66 0.33 2.5 (median value) and 5.0 (90 percentile value) (2) 5.0 (median value) and 10.0 (90 percentile value) (3) 5.0 (median value) and 10.0 (90 percentile value) (2) 10.0 (median value) and 20 (90 percentile value) (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

Rocky shore reduced species list multimetric system 0.80 0.60

Macroalgae Opportunistic macroalgae multimetric system 0.80 0.60

Physico-chemical conditions supporting the biological elements

PART A: General conditions

THERMAL CONDITIONS

Thermal conditions River water body Lake water body

Transitional water body Coastal water body

Temperature Not greater than a 1.5°C rise in ambient temperature outside the mixing zone

OXYGENATION CONDITIONS (BIOCHEMICAL OXYGEN DEMAND)

Oxygenation conditions River water body
Lake water body Transitional water body Coastal water body

Biochemical Oxygen Demand (BOD)(mg O 2 /l) High status 1.3 (mean (1)) or 2.2 (95%ile)Good status 1.5 (mean (1)) or 2.6 (95%ile) 4.0 mg/l (95%ile)

(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.

OXYGENATION CONDITIONS CONTINUED (DISSOLVED OXYGEN)

Oxygenation conditions River water body Lake water body Transitional water body(Summer) Coastal water body(Summer)

Dissolved oxygen lower limit 95%ile >80% saturation (<u>0 psu</u> (1))95%ile >70% saturation (35 psu)95%ile >80% saturation (35 psu) 95%ile > 80% saturation

Dissolved oxygen upper limit 95%ile <120% saturation (<u>0 psu</u>) 95%ile <130% saturation (<u>35 psu</u>) 95%ile <120% saturation (<u>35 psu</u>) 95%ile <120% saturation

(1) psu: The Practical Salinity Unit defines salinity in terms of a conductivity ratio of a sample to that of a solution of 32.4356 g of KCL at 15°C in I kg of solution. A sample of seawater at 15°C with a conductivity equal to this KCL solution has a salinity of exactly 35 practical salinity units.

ACIDIFICATION STATUS

Acidification status River water body Lake water body
Transitional water body Coastal water body

- (2) Water hardness 100 mg/1 CaCO3
- (3) Water hardness > 100 mg/1 CaCO3

NUTRIENT CONDITIONS

Nutrient conditions River water body Lake (1)
Transitional water body Coastal water body

Total Ammonia (mg N/l) High status 0.040 (mean) or 0.090 (95%ile)Good status 0.065 (mean) or 0.140 (95%ile)

Dissolved Inorganic Nitrogen (mg N/l) Good status($\underline{0}$ psu (2)) 2.6 mg N/l($\underline{34.5}$ psu (2)) 0.25 mg N/lHigh status($\underline{34.5}$ psu (2)) 0.17 mg/N/l

Molybdate ReactivePhosphorus (MRP)(mg P/l) High status 0.025 (mean) or 0.045 (95%ile)Good status 0.035 (mean) or 0.075 (95%ile) (0-17 psu) 0.060 (median)(35psu) 0.040 (median)

- (1) Total phosphorus (TP) is an important measure of lake trophic status and TP measurements are included as part of the lakes monitoring programme; TP boundary conditions are yet to be established for lakes.
- (2) Linear interpolation to be used to establish the limit value for water bodies between these salinity levels based on the median salinity of the water body being assessed.

Table 10

Physico-chemical conditions supporting the biological elements

PART B: Specific pollutants

AA: annual average (1)

MAC: maximum allowable concentration

Unit: [g/l]

Name of substance Environmental quality standard (EQS) (2) (3) (6)

AA-EQS (7) Inland surface waters AA-EQSOther surface waters MAC-EQS (8) Inland surface waters MAC-EQSOther surface waters

Arsenic	25	20	-	-
Chromium III	4.7	-	32	-
Chromium VI	3.4	0.6	-	32
Copper (4)	5 or 30	5	-	-
Cyanide	10	10	-	-
Diazinon	0.01	0.01	0.02	0.26
Dimethoate	0.8	0.8	4	4
Fluoride	500	1,500	-	-
Glyphosate	60	-	-	-
Linuron	0.7	0.7	0.7	0.7
Mancozeb	2	2	7.3	7.3
Monochlorobenzene	1.5	25	-	-
Phenol	8	8	46	46
Toluene	10	10	-	-
Xylenes	10	10	-	-
Zinc (5)	8 or 50 o	r 100	40	-

⁽¹⁾ The calculation of the arithmetic mean and the analytical method used must be in accordance with 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⁾ The values for all metals are for dissolved metals i.e. after filtration through a 0.45 micron filter, In designing monitoring programmes, it was recommended that total chromium be determined. Where the result for total chromium is less than the EQS for Cr VI, no further investigation is deemed necessary. Where the total Chromium level is above the EQS, an assessment should be made of the potential discharges of Cr VI into the waterbody. Where there is a risk of Cr VI contamination, speciation studies should be included in the monitoring programme.

- (3) The values for all metals, except Chromium VI, are as added values to background concentrations.
- (4) In the case of Copper the value 5 applies where the water hardness measured in mg/l CaCO3 is less than or equal to 100; the value 30 applies where the water hardness exceeds 100 mg/l CaCO3.
- (5) In the case of Zinc, the standard shall be 8 g/l for water hardness with annual average values less than or equal to 10 mg/l CaCO3, 50 g/l for water hardness greater than 10 mg/l CaCO3 and less than or equal to 100 mg/l CaCO3 and 100 g/l elsewhere.
- (6) Standards for compounds other than metals refer to total concentrations in the whole water sample.
- (7) AA-EQS means that for each representative monitoring point within the waterbody, the arithmetic mean of the concentrations measured over a twelve month monitoring period does not exceed the standard.
- (8) MAC-EQS means that for each representative monitoring point within the waterbody no measured concentration exceeds the standard.

SCHEDULE 6

Table 11

The environmental quality standards 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 m filter or any equivalent pre-treatment

Priority Substances

AA: annual average (1)

MAC: maximum allowable concentration

Unit: [g/l]

(1) (2) (3) (4) (5) (6) (7)

N° Name of substance Chemical Abstracts Service number AA-EQS (2)
Inland surface waters (3)
Inland surface waters (3)
MAC-EQS (4) Other surface waters

(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-tetrachle applicable	oride (5)	56-23-5	5	12	12	not ap	plicable	not
(5) Chlorfenvinpho	s 470-90-6	0.1	0.1	0.3	0.3			
(6) Chlorpyrifos (C	hlorpyrifos-	ethyl)	2921-8	8-2	0.03	0.03	0.1	0.1
(7a) Cyclodiene pest 172-20-8465-73-6	icides:Aldrin =0.01		eldrin (5) not app			rin (5) applica)-260-57-
(7b) 6 applicable	DDT total		not app	olicable	0.02	2.5	0.025	not
para-para-DDT applicable	(5)	50-29-3	3	0.01	0.01	not ap	plicable	not
(8) 1,2-Dichloroeth applicable	ane	107-06	-2	10	10	not ap	plicable	not
(9) Dichloromethan applicable	e	75-09-2	2	20	20	not ap	plicable	not
(10) Di(2-ethylhexyl applicable	DEHP)	117-81	-7	1.3	1.3	not app	olicable not	
(11) Diuron	330-54-1	0.2	0.2	1.8	1.8			
(12) Fluoranthene	206-44-0	0.1	0.1	1	1			
(13) Isoproturon	34123-59-	6	0.3	0.3	1.0	1.0		
(14) Lead and its con applicable	npounds	7439-92	2-1	7.2	7.2	not ap	plicable	not
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
N° Name of subst (2) Inland surface w Inland surface water	AA-F	Chemical Abstracts Ser AA-EQS (2) Other surfa MAC-EQS (4) Other su			ace waters MAC-EQS (4)			
(15) Naphthalene	91-20-3	2.4	1.2	not appl	icabl	e	not app	plicable

`	(16) Nickel and its compounds applicable			2-0	20	20 not applicable not			
(17) Octylphenol((4-(1,1',3,3'-ter applicable not applic					ohenol))	140-66-9	0.1	0.01	not
(18	(18) Pentachloro-phenol		87-86-5		0.4	0.4 1 1		1	
(19) Simazine	122-34-9	1	1	4	4			
(20a) Tetrachloro-ethylene (5) applicable		127-18-4 10		10	10 not applicable not				
(20b) Trichloro-ethylene (5) applicable		79-01-6		10	10 not applicable not				
`) Trichloro-benzen olicable	es	12002-	48-1	0.4	0.4	not ap	plicable	not
(22) Trichloro-methane applicable		67-66-3		2.5	2.5	not applicable		not not	

- (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) 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.
- (6) 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 7254-8; EU Number 200-783-0).

Table 12

(8) Hexachloro-cyclohexane

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

for the purpose of assigning chemical status										
	Priority Hazardous Substances									
	AA: annual average (1)									
	MAC: maximum allowable concentration									
	Unit: [g/l]									
		(1)	(2)	(3)	(4)	(5) (6) (7)				
N° Name of substance Chemical Abstracts Service number Inland surface waters (3) AA-EQS (2) Other surface waters Inland surface waters (3) MAC-EQS (4) Other surface waters										
(1)	Anthracene	120-12-7	0.1	0.1	0.4	0.4				
(2)	Brominated diphenyles not applicable	0.0002	not applicable							
(3) Cadmium and its compounds (depending on water hardness classes) (6) 7440-43-9 0.08 (Class1)0.08 (Class2)0.09 (Class3)0.15 (Class4)0.25 (Class5) 0.2 0.45 (Class1)0.45 (Class2)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	85535-84-	8	0.4	0.4	1.4 1.4				
(5)	Endosulfan	115-29-7	0.005	0.0005	0.01	0.004				
(6)	Hexachloro-benzene	118-74-1	0.01	0.01	0.05	0.05				
(7)	Hexachloro-butadiene	87-68-3	0.1	0.1	0.6	0.6				

608-73-1

0.02

0.002

0.02

0.04

(9) Mercury and its	Mercury and its compounds		0.05	0.05	0.07	0.07
(10) Nonylphenol (4	104-40-5	0.3	0.3	2.0 2.0		
(11) Pentachloro-benzene 608-93-5 applicable		0.007	0.0007	not applical	ble not	
(12) Polyaromatic hy not applicable	H) (7) cable	not applicable not applicable		not applicable		
Benzo(a)pyrene	50-32-8	0.05	0.05	0.1	0.1	
Benzo(b)fluor-a not applicable	Benzo(b)fluor-anthene not applicable		=0.03	=0.03	not applica	ble
Benzo(k)fluor-a	Benzo(k)fluor-anthene					
Benzo(g,h,i)-pe applicable	=0.002	=0.002	not applical	ble not		
Indeno(1,2,3-cd	Indeno(1,2,3-cd)-pyrene					
(13) Tributyltin com 0.0002	ltin-cation) 0.0015	36643-28	-4	0.0002		

- (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) 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.

- (6) 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 CaCO 3 /1, Class 2: 40 to < 50 mg CaCO 3 /1, Class 3: 50 to <100 mg CaCO 3 /1, Class 4: 100 to <200 mg CaCO 3 /1 and Class 5: 200 mg CaCO 3 /1).
- (7) For the group of substances polyaromatic hydrocarbons (PAH) each individual EQS is applicable, i.e. the EQS for Benzo(a)pyrene, the EQS for the sum of Benzo(b)fluoranthene and Benzo(k)fluoranthene and the EQS for the sum of Benzo(g,h,i)perylene and Indeno(1,2,3-cd)pyrene must be met.



GIVEN under the Official Seal of the Minister for the Environment,

16 July 2009

JOHN GORMLEY

Minister for the Environment, Heritage and Local Government.

EXPLANATORY NOTE

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

These Regulations give statutory effect to Directive 2008/105/EC on environmental quality standards in the field of water policy. The Regulations also give further effect to Directive 2000/60/EC establishing a framework for Community action in the field of water policy and Directive 2006/11/EC on pollution caused by certain dangerous substances discharged into the aquatic environment of the Community.

The Regulations apply to all surface waters and provide, inter alia, for—

- •The establishment of legally binding quality objectives for all surface waters and environmental quality standards for pollutants.
- •The examination and where appropriate, review of existing discharge authorisations by Public Authorities to ensure that the emission limits laid down in authorisations support compliance with the new water quality objectives/standards.
- •The classification of surface water bodies by the EPA for the purposes of the Water Framework Directive.
 - •The establishment of inventories of priority substances by the EPA.
- •The drawing up of pollution reduction plans by coordinating local authorities (in consultation with the EPA) to reduce pollution by priority substances and to cease and/or phase out discharges, emissions or losses of priority hazardous substances.

These Regulations revoke the Local Government (Water Pollution) Act 1977 (Water Quality Standards for Phosphorus) Regulations 1998 (S.I. No. 258 of 1998) and the Water Quality (Dangerous Substances) Regulations 2001 (S.I. No. 12 of 2001).

1 O.J. No. L64/52, 4 March 2006

2 O.J. No. L327/1, 22 December 2000

3 O.J. No. L 348/84, 24 December 2008

- (1) Surface waters achieving a status below moderate shall be classified as poor or bad
- (2) The text in Table 4 provides a general definition only of ecological quality. For the purpose of classifying surface water ecological satus, regard must be had, as appropriate, to the biological, hydromorphological and supporting physico-chemical quality elements listed in tables 5, 6 and 7 of this Schedule and to the boundary conditions established in Tables 8, 9 and 10 of Schedule 5.
- (1) Type 4: Low alkalinity (<20 mg/1 CaCO 3), deep (>4m) and large (<50 ha) Type 7: Moderate alkalinity (20-100 mg/1 CaCO 3), deep (>4m) and small (< 50 ha) Type 8: Moderate alkalinity (20-100 mg/1 CaCO 3), deep (>4m) and large (>50 ha) Type 11: High alkalinity (>100 mg/1 CaCO 3), deep (>4m) and small (<50 ha) Type 12: High alkalinity (>100 mg/1 CaCO 3), deep (>4m) and large (>50 ha)
- (2) 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.
- (3) 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.
- (1) Growing season March to September
- (2) Cold acetone extraction method
- (3) Hot methanol extraction method
- (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.
- (1) psu: The Practical Salinity Unit defines salinity in terms of a conductivity ratio of a sample to that of a solution of 32.4356 g of KCL at 15°C in I kg of solution. A sample of seawater at 15°C with a conductivity equal to this KCL solution has a salinity of exactly 35 practical salinity units.
- (2) Water hardness 100 mg/1 CaCO3

- (3) Water hardness > 100 mg/1 CaCO3
- (1) Total phosphorus (TP) is an important measure of lake trophic status and TP measurements are included as part of the lakes monitoring programme; TP boundary conditions are yet to be established for lakes.
 - (2) Linear interpolation to be used to establish the limit value for water bodies between these salinity levels based on the median salinity of the water body being assessed.
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