The Surface Waters (Fishlife) Directions 2010

2010 (no.8)

These Directions revoke the Surface Waters (Fishlife) Directions 1997 and the Surface Waters (Fishlife) (Amendment) Directions 2003. The Secretary of State, and the Welsh Ministers, with the agreement of the Secretary of State to the extent that there is any effect in England or those parts of Wales which are within the catchment areas of the rivers Dee, Wye and Severn, in exercise of the powers conferred by section 40 of the Environment Act 1995(**a**) and now vested in them(**b**), and having consulted the Environment Agency as required by section 40(6) of that Act, concurrently give the Environment Agency the following Directions:

Citation, commencement, revocation and interpretation

1.—(1) These Directions may be cited as the Surface Waters (Fishlife) Directions 2010 and come into force on 19 February 2010.

(2) The Surface Waters (Fishlife) Directions 1997 and the Surface Waters (Fishlife) (Amendment) Directions 2003 are revoked.

(3) Expressions used in these Directions which are also used in Directive 2006/44/EC of the European Parliament and of the Council (the quality of fresh waters needing protection or improvement in order to support fish life)(**c**) have the same meaning as in that Directive.

(4) References in these Directions to the Surface Waters (Fishlife) (Classification) Regulations 1997 are to those Regulations as amended(**d**).

Guideline values and no deterioration principle

2.—(1) In discharging its pollution control functions in relation to any waters classified under the Surface Waters (Fishlife) (Classification) Regulations 1997(**e**), the Environment Agency must—

(a) endeavour to observe the guideline values and comments in the Schedule to these Directions for waters of the relevant class; and

(b) take into account the principle that implementation of measures taken pursuant to Directive 2006/44/EC may on no account lead, either directly or indirectly, to increased pollution of fresh water.

(2) In this paragraph, "pollution control functions" has the same meaning as in section 5 of the Environment Act 1995.

(**a**) 1995 c.25.

(**b**) By the National Assembly for Wales (Transfer of Functions) Order 1999 (S.I. 1999/672), article 2 and Schedule 1, the functions under section 40 of the Environment Act 1995 are exercisable by the Secretary of State and the National Assembly for Wales concurrently in relation to the Environment Agency as a cross border body. The functions of the National Assembly for Wales are now exercisable by the Welsh Ministers by virtue of section 162 of, and paragraph 30 of Schedule 11 to the Government of Wales Act 2006 (c.32). The Welsh Ministers may exercise these functions only with the agreement of the Secretary of State where such exercise would have an effect in England or where the exercise of the functions relates to matters including water resources management, control of pollution of water resources and rivers and watercourses, in those parts of Wales which are within the catchment areas of the rivers Dee, Wye or Severn.

(**c**) OJ No L264, 25.09.06, p 20.

(**d**) S.I. 2003/1053 as amended by S.I. 2009/1264.

(**e**) S.I. 1997/1331, amended by S.I. 2003/1053 and S.I. 2009/1264.

Compliance with standards

3.—(1) Subject to sub-paragraphs (2) and (3) below, any waters classified under the Surface Waters (Fishlife) (Classification) Regulations 1997, in relation to any period of twelve months must be treated as complying with any standard for any parameter adopted as a result of paragraph 2 if in that period in relation to those waters—

(a) in the case of the parameter for BOD_5, non-ionized ammonia, total ammonium, nitrites or dissolved copper, 95 per cent of the samples taken for that parameter in accordance with paragraph 4 comply with the standard;

(b) in the case of the parameter for dissolved oxygen, the percentages specified in the Schedule to these Directions of samples taken for that parameter in accordance with paragraph 4 of these Directions comply with the standard;

(c) in the case of the parameter for suspended solids, the average concentration of samples taken comply with the standard.

(2) Where the frequency of sampling is lower than one sample per month for any parameter mentioned in sub-paragraph (1)(a) in relation to any waters classified under the Surface Waters (Fishlife) (Classification) Regulations 1997, 100 per cent of samples taken for that parameter in accordance with paragraph 4 in relation to those waters must comply if the waters are to be treated as meeting the standard adopted as a result of paragraph 2.

(3) Non-compliant samples are to be ignored for the purposes of sub-paragraphs (1) and (2) if they are the result of a flood or any other natural disaster.

Sampling and analysis

4.—(1) The Environment Agency must ensure that waters classified under the Surface Waters (Fishlife) (Classification) Regulations 1997 are sampled and samples are analysed in accordance with the following provisions of this paragraph.

(2) Samples in relation to any waters classified under the Surface Waters (Fishlife) (Classification) Regulations 1997 must always be taken at the same sampling point, and at the same depth, as samples taken in relation to those waters under those Regulations.

(3) Subject to sub-paragraphs (4) and (5), sampling for any parameter must be carried out at least at the minimum frequency specified in the Schedule to these Directions in relation to that parameter for waters of the relevant class.

(4) Where the Environment Agency's records show that the quality of any waters classified under the Surface Waters (Fishlife) (Classification) Regulations 1997 is appreciably higher for any parameter than the minimum required by those Regulations for waters of that class and the standards adopted as a result of paragraph 2 of these Directions—

(a) the Agency may decide that the frequency of sampling may be reduced for that parameter; and

(b) if there is no pollution or risk of deterioration in the quality of those waters, the Agency may decide that no sampling for that parameter is necessary.

(5) Where sampling shows that the standards adopted as a result of paragraph 2 are not being met, the Environment Agency must establish whether this is the result of chance, a natural phenomenon or pollution and must adopt appropriate measures.

(6) Samples for any parameter must be analysed using the reference methods of analysis specified in the Schedule to these Directions in relation to that parameter or methods which are at least as reliable as the reference methods.

Derogations

5.—(1) The Agency may derogate from the requirements of these Directions—

(a) in the case of parameter for suspended solids, because of exceptional weather or special geographical conditions;

(b) where waters classified under the Surface Waters (Fishlife) (Classification) Regulations 1997 undergo natural enrichment in certain substances as a result of which they do not comply with any standard adopted as a result of paragraph 2 for those waters.

(2) In these Directions, "natural enrichment" means a process whereby without human intervention a given body of water receives from the soil certain substances contained therein.

Programmes

6. The Environment Agency must ensure that programmes are established for all waters classified under the Surface Waters (Fishlife) (Classification) Regulations 1997 in order to reduce pollution and to ensure that—

(a) those waters conform, within 5 years following designation, to the criteria set out in Schedule 1 to those Regulations; and

(b) the Agency's pollution control functions are discharged in accordance with paragraph 2(1)(a).

Registers

7.—(1) The Environment Agency must maintain on its registers under section 190(1) of the Water Resources Act 1991 (pollution control register) full details of—

(a) sampling points fixed under regulation 4(3) of the Surface Waters (Fishlife) (Classification) Regulations 1997;

(b) results of analysis of samples taken under those Regulations and these Directions;

(c) standards adopted by the Agency as a result of paragraph 2 in relation to any waters classified under those Regulations;

(d) derogations under regulation 5 of those Regulations or under paragraph 5 of these Directions; and

(e) programmes established under paragraph 6.

(2) The Environment Agency must make information entered on its registers under sub-paragraph (1), and facilities for obtaining copies of entries, available to members of the public at the same times, in the same manner and on the same terms as information and facilities provided by virtue of section 190 of the Water Resources Act 1991.

Chris Ryder
A Senior Civil Servant, for and on behalf of the Secretary of State
for Environment, Food and Rural Affairs

18 February 2010

Claire Bennett
A Senior Civil Servant, for and on behalf of the Welsh Ministers

18 February 2010

SCHEDULE

Paragraphs 2 and 4

PART 1

GUIDELINE VALUES IN RELATION TO THE QUALITY OF SALMONID AND CYPRINID WATERS

No. in Annex to 2006/44/EC	**Parameter**	**Salmonid waters (guideline values and comments)**	**Cyprinid waters (guideline values and comments)**	**Methods of analysis or inspection**	**Minimum sampling and measuring frequency**	**Observations**
2	Dissolved oxygen (mg/l O_2)	50% ≥ 9 100% ≥ 7	50% ≥ 8 100% ≥ 5	Winkler's method or specific electrodes (electro-chemical method)	Monthly, minimum one sample representative of low oxygen conditions of the day of sampling However, where major daily variations are suspected, a minimum of two day samples in one day must be taken	
4	Suspended solids (mg/l)	≤ 25	≤ 25	Filtration through a 0.45 µm filtering membrane, or centrifugation (five minutes minimum, avaerage acceleration of 2,800 to 3,200g) drying at 105°C and weighing		The values shown are average concentrations and do not apply to suspended solids with harmful chemical properties Floods are liable to cause particularly high concentrations

No. in Annex 1 to 2006/44/EC	Parameter	Salmonid waters (guideline values and comments)	Cyprinid waters (guideline values and comments)	Methods of analysis or inspection	Minimum sampling and measuring frequency	Observations
5	BOD_5 (mg/l O_2)	≤ 3	≤ 6	Determination of O_2 by the Winkler method before and after five days incubation in complete darkness at 20 ± 1°C (nitrification should not be inhibited)		
7	Nitrites (mg/l NO_2)	≤ 0.01	≤ 0.03	Molecular absorption spectrophotometry		
10	Non-ionised ammonia (mg/l NH_3)	≤ 0.005		Molecular absorption spectrophotometry using indophenol blue or Nessler's method associated with pH and temperature determination	Monthly	Values for non-ionised ammonia may be exceeded in the form of minor peaks in the daytime
11	Total ammonium (mg/l NH_4)	In order to diminish the risk of toxicity due to non-ionised ammonia, of oxygen consumption due to nitrification and of eutrophication, the concentrations of total ammonium should not exceed 0.04 mg/l for salmonid waters and 0.2 mg/l for cyprinid waters				
14	Dissolved copper (mg/l)	≤ 0.04		Atomic absorption spectrometry		The values correspond to a water hardness of 100 mg/l $CaCO_3$ For hardness levels between 10 and 300 mg/l corresponding limit values can be found in the Table in Part II of this Schedule

PART II

COPPER CONCENTRATIONS (mg/l Cu) FOR DIFFERENT WATER HARDNESS VALUES BETWEEN 10 AND 300 mg/l $CaCO_3$

	Water hardness (mg/l $CaCO_3$)			
	10	**50**	**100**	**300**
(mg/l Cu)	0.005 (1)	0.022	0.04	0.112

(1)The presence of fish in waters containing higher concentrations of copper may indicate a predominance of dissolved organo-cupric complexes.