STATUTORY INSTRUMENTS

1997 No. 1331

WATER RESOURCES, ENGLAND AND WALES

The Surface Waters (Fishlife) (Classification) Regulations 1997

Made - 19th May 1997
Laid before Parliament - 22nd May 1997
Coming into force - 12th June 1997

The Secretary of State for the Environment and the Secretary of State for Wales, acting jointly in exercise of the powers conferred on them by sections 82, 102 and 219(2) of the Water Resources Act 1991[1] and of all other powers enabling them in that behalf, hereby make the following Regulations:

Citation, commencement and interpretation

1. - (1) These Regulations may be cited as the Surface Waters (Fishlife) (Classification) Regulations 1997 and shall come into force on 12th June 1997.

(2) Expressions used in these Regulations which are also used in Directive 78/659/ EEC[2] (the quality of fresh waters needing protection or improvement in order to support fish life) shall have the same meaning as in that Directive.

Classification of waters

2. The classifications SW ("salmonid waters") and CW ("cyprinid waters"), and the criteria for those classifications, set out in the Schedule to these Regulations shall apply for classifying inland freshwaters which need protection or improvement in order to support fish life.

Compliance with relevant requirements

3. - (1) Subject to paragraphs (2) and (3) below, any waters classified under these Regulations shall be treated in relation to any period of twelve months as complying with the requirements specified in the Schedule to these Regulations for waters of the relevant class for any parameter if in that period in relation to those waters -

(a) in the case of the parameter for pH, non-ionised ammonia, total ammonium, total residual chlorine or total zinc, 95 per cent of the samples taken for that parameter in accordance with regulation 4 below comply with the requirements;

(b) in the case of the parameter for temperature or dissolved oxygen, the percentage specified in that Schedule of samples taken for that parameter in accordance with regulation 4 below comply with the requirements.

(2) When the frequency of sampling is lower than one sample per month for any parameter mentioned in sub-paragraph (1)(a) above in relation to any waters classified under these Regulations, 100 per cent of samples taken for that parameter in accordance with regulation 4 in relation to those waters must

comply with the requirements for that parameter specified in the Schedule to these Regulations for waters of the relevant class.

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

Sampling and analysis

4. - (1) The Environment Agency shall ensure that waters classified under these Regulations are sampled and samples are analysed in accordance with the following provisions of this Regulation.

(2) Samples in relation to any waters classified under these Regulations shall always be taken at the same sampling point.

(3) The Environment Agency shall fix the exact position of the sampling point, and the depth at which samples are to be taken, having regard in particular to -

(a) the distance of the sampling point to the nearest point where pollutants are discharged; and

(b) local environmental conditions.

(4) Subject to paragraphs (5) and (6) below, sampling for any parameter shall be carried out at least at the minimum frequency specified in the Schedule to these Regulations for that parameter for waters of the relevant class.

(5) Where the Environment Agency's records show that the quality of any waters classified under these Regulations is appreciably higher for any parameter than the minimum required by these Regulations for waters of that class, the Agency may reduce the sampling frequency for that parameter or, if there is no pollution and no risk of deterioration of its quality, it may dispense with sampling for that parameter altogether.

(6) Where sampling shows that the requirements of regulation 3 above are not being complied with, the Environment Agency shall establish whether this is the result of chance, a natural phenomenon or pollution and shall adopt appropriate measures.

(7) Samples for any parameter shall be analysed using the reference methods of analysis specified in the Schedule to these Regulations 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 Regulations -

(a) in the case of requirements marked (0) in the Schedule to these Regulations, because of exceptional weather or special geographical conditions; or

(b) where waters classified under these Regulations undergo natural enrichment in certain substances as a result of which they do not comply with the requirements specified in the Schedule to these Regulations for waters of the relevant class.

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

Modifications of the Water Resources Act 1991

6. - (1) Section 83 of the Water Resources Act 1991 shall have effect -

(a) as if it imposed a duty on the Secretary of State to exercise the powers conferred on him by that section to classify appropriately under these Regulations such waters as are appropriate for the purpose of giving effect to Directive 78/659/EEC in England and Wales; and

(b) in relation to the performance of that duty, as if subsections (4) and (5) of that section were omitted.

(2) Section 104(1) of the Water Resources Act 1991 (meaning of "controlled waters") shall have effect for the purpose of giving effect to Directive 78/659/EEC as if "inland freshwaters"included all waters which are fresh waters for the purposes of that Directive.

(3) Section 202(2) of the Water Resources Act 1991 (information in connection with the control of pollution) shall have effect as if it conferred power on the Secretary of State and the Environment Agency to require the furnishing of information reasonably required for the purposes of giving effect to Directive 78/659/EEC.

John Prescott
Secretary of State, Department of Environment
19th May 1997

Signed by authority of the Secretary of State for Wales
Win Griffiths
Parliamentary Under Secretary of State, Welsh Office
19th May 1997

SCHEDULE
Regulations 2, 3 and 4

PART I

CRITERIA FOR CLASSIFICATION OF WATERS AS SALMONID AND CYPRINID WATERS
CRITERIA FOR CLASSIFICATION OF WATERS AS SALMONID AND CYPRINID WATERS

No. In Annex I to 78/659/EEC	Parameter	Requirements to be satisfied for salmonid waters	Requirements to be satisfied for cyprinid waters	Methods of analysis or inspection and measuring frequency	Minimum sampling	Observations
1	Temperature (°C)	1. Temperature measured downstream of a point of thermal discharge (at the edge of a mixing zone) must not exceed the unaffected temperature by more than 1.5°C for salmonid waters and 3°C for cyprinid waters Derogations limited in geographical scope may be decided by the Environment Agency if the Agency can show that there are no harmful consequences for the balanced development of the fish population 2. Thermal discharges must not cause the temperature downstream of the point of thermal discharge (at the edge of the mixing zone) to exceed - (a) 10°C (0) during the breeding season in the case of waters which contain species which need cold water for reproduction; (b) at other times or in the case of waters which do not contain such species, 21.5°C (0) for	Thermometry	Weekly, both upstream and downstream of the point of thermal discharge	Over-sudden variations in temperature must be avoided	

		salmonid waters and 28°C (0) for cyprinid waters Temperature limits may, however, be exceeded for 2% of the time			
2	Dissolved oxygen (mg/l O2)	50%>=9 When the oxygen concentration falls below 6 mg/l, the Environment Agency shall comply with regulation 4(6) and the Agency must prove that this situation will have no harmful consequences for the balanced development of the fish population 50%>=7 When the oxygen concentration falls below 4 mg/l, the Environment Agency shall comply with regulation 4(6) and the Agency must prove that this situation will have no harmful consequences for the balanced development of the fish population	Winkler's method or specific electrodes (electro-chemical method)	Monthly,minimum one sample representative of low oxygen conditions on the day of sampling However, where major daily variations are suspected, a minimum of two samples in one day shall be taken	

3	pH	6 to 9 (0) Artificial pH variations with respect to the unaffected values shall not exceed ±0.5 of a pH unit within the limits falling between 6 and 9 provided that these variations do not increase the harmfulness of other substances present in the water	Electrometry calibration by means of two solutions with known pH values, preferably on either side of, and close to the pH being measured	Monthly
8	Phenolic compounds (mg/l C6 H5 OH)	Phenolic compounds must not be present in such concentrations that they adversely affect fish flavour	By taste taste shall be made only where the presence of phenolic compounds is presumed	An examination by
9	Petroleum hydrocarbons	Petroleum products must not be present in the water in such quantities that they - (a) form a visible film on the surface of the water or form coatings on the beds of water-courses and lakes; (b) impart a detectable "hydrocarbon" taste to fish; (c) produce harmful effects on fish.	Visual and by taste A visual examination where the presence of hydrocarbons is presumed	Monthly shall be made regularly once a month, with an examination by taste only
10	Non-ionised ammonia (mg/l	<=0.025 Values for non-ionised	Molecular absorption spectrophotometry using	Monthly

	NH3)		indophenol blue or Nessler's		
	ammonia may				
			method associated with pH		be
exceeded in					
			and temperature determination		the
form of					
					minor peaks
in					
					the daytime
11	Total	In order to diminish the risk of	In particular geographical or		Molecular
absorption	Monthly	ammonium	toxicity due to non-ionised		climatic
conditions and	spectrophotometry				
	(mg/l NH4)	ammonia, of oxygen	particularly in cases of low		using
indophenol blue					
		consumption due to nitrification	water temperature and of		or Nessler's
method					
		and of eutrophication, the	reduced nitrification or where		associated
with pH and					
		concentrations of total	the Environment Agency can		temperature
determination					
		ammonium should not exceed 1	show that there are no harmful		
		mg/l	consequences for the balanced		
			development of the fish		
			population, the Agency may fix		
			a value higher than 1 mg/l		
12	Total residual	<=0.005	DPD-method	Monthly	
	The value				
	chlorine (mg/l		(diethyl-p-phenylenediamene)		
	corresponds to				
	Zn)				pH = 6
					Higher
	concentrations				
					of total chlorine can
be					
					accepted if
the					
					pH is higher
13	Total Zinc	<=0.3	Atomic absorption		Monthly
	The values				
	(mg/l Zn)	<=1.0	spectrometry		
	correspond to				
					a water hardness of 100 mg/l CaCO3
					For hardness levels
between					

10 and 500 mg/l

corresponding limit values can be found in the Table in Part II of this Schedule

PART II

ZINC CONCENTRATIONS (mg/l Zn) FOR DIFFERENT WATER HARDNESS VALUES BETWEEN 10 AND 500 mg/l CaCO3

Classification of waters	Water hardness (mg/l CaCO3)			
	10	50	100	500
Salmonid waters (mg/l Zn)	0.03	0.2	0.3	0.5
Cyprinid waters (mg/l Zn)	0.3	0.7	1.0	2.0

EXPLANATORY NOTE
(This note is not part of the Regulations)

These Regulations prescribe a system for classifying the quality of inland freshwaters which need protection or improvement in order to support fish life.

The classifications SW ("salmonid waters") and CW ("cyprinid waters") reflect the mandatory values assigned by Directive 78/659/EEC (on the quality of fresh waters needing protection or improvement in order to support fish life) to the parameters listed in the Schedule to these Regulations.

The Regulations also incorporate the reference methods of measurement, and the minimum frequency required for sampling and analysis, laid down in that Directive for those parameters.

The Regulations, together with the Surface Waters (Fishlife) Directions 1997, transpose Directive 78/659/EEC in relation to England and Wales. Copies of the Surface Waters (Fishlife) Directions 1997 may be obtained from:

Water Quality Division
Department of the Environment,
Romney House,
43 Marsham Street,
London SW1P 3PY.

Environment Division,
Welsh Office,
Cathays Park,
Cardiff CF1 3NQ.

Notes:

[1] 1991 c.57; see section 221(7) as to the joint exercise of functions exercisable concurrently.
[2] O.J. No. L 222, 14.8.1978, p. 1