

EUROPEAN COMMUNITIES (QUALITY OF SALMONID WATERS) REGULATIONS 1988

The Minister for the Environment in exercise of the powers conferred on him by section 3 of the European Communities Act, 1972 (No. 27 of 1972) and for the purpose of giving effect to the Council Directive of 18th July, 1978 (No. 78/659/EEC)* hereby makes the following Regulations:

*O.J. No. L222/1, 14 August, 1978.

REG 1

Citation

1. These Regulations may be cited as the European Communities (Quality of Salmonid Waters) Regulations, 1988.

REG 2

Interpretation

2. In these Regulations:—

any reference to a Schedule or article which is not otherwise identified is a reference to a Schedule or article of these Regulations;

any reference to a sub-article or paragraph which is not otherwise identified is a reference to a sub-article or paragraph of the provision in which the reference occurs;

"local authority" means the council of a county or the corporation of a county borough in whose functional area salmonid waters are located;

"the Minister" means the Minister for the Environment;

"salmonid waters" means the waters specified in the First Schedule;

"sampling" includes visual inspection, measurement, monitoring, tasting and analysis.

REG 3

Salmonid Waters and Quality Standards

3. (1) The fresh waters specified in the First Schedule, being waters capable of supporting salmon (*Salmo salar*), trout (*Salmo trutta*), char (*Salvelinus*) and whitefish (*Coregonus*), are hereby designated as salmonid waters for the purposes of these Regulations.

(2) Salmonid waters shall meet the quality standards specified in the Second Schedule on the basis of and subject to the conditions so specified.

(3) Deviations from the standards referred to in sub-article (2) shall not be taken into consideration in determining conformity with these Regulations where the deviations are the result of floods or other natural disasters.

REG 4

Sampling of Salmonid Waters

4. (1) A local authority shall, in accordance with this article, carry out, or cause to be carried out, sampling of salmonid waters in its functional area in respect of the parameters specified in the Second Schedule.

(2) Sampling locations and the depth at which samples are to be taken shall be determined by the local authority on the basis of local environmental conditions.

(3) (a) Subject to paragraph (b), sampling shall be carried out in the manner specified in Column 2 of the Third Schedule and at a frequency not less than the frequency so specified.

(b) Where sampling undertaken during the preceding two years in relation to any of the parameters referred to in sub-article (1) has produced results which are appreciably better than the standard specified in Column 3 of the Second Schedule, sampling in relation to the parameter concerned may be—

(i) reduced to a frequency determined by the local authority and approved by the Minister, or

(ii) discontinued, with the approval of the Minister, where there is no risk of deterioration in the quality of the water.

(4) (a) As far as practicable, a local authority shall use the methods of analysis and inspection specified in Column 3 of the Third Schedule.

(b) Where other methods of analysis are used, a local authority shall ensure that the results obtained are equivalent to, or comparable with, results obtained by the methods specified in Column 3 of the Third Schedule.

(5) The Minister may from time to time issue recommendations to local authorities in relation to the performance of their functions under this article and local authorities shall have regard to any such recommendations.

(6) Results of sampling carried out under this article and reports on compliance with the standards specified in the Second Schedule shall be given to the Minister at two yearly intervals as soon as may be after the completion of sampling for the years concerned, or at such other intervals as may be determined by the Minister.

REG 5

Duty of local authority to ensure compliance with standards

5. (1) Where salmonid waters do not comply with the standards referred to in article 3 (2), the local authority shall establish the reason for the non-compliance and, unless a departure has been granted under sub-article (2), adopt an action programme, comprising appropriate measures, to reduce pollution and to ensure that the standards are complied with.

(2) A departure from the standards referred to in article 3 (2) may be granted to a local authority by the Minister—

(a) in the case of the parameters temperature, pH and suspended solids — where exceptional weather or geographical conditions have arisen;

(b) where deviations from the standards have arisen because the

waters concerned have undergone natural enrichment from the soil, without human intervention.

(3) An application for a departure under this article shall contain such information as may be specified by the Minister.

(4) The granting of a departure shall be subject to such conditions, if any, as the Minister may specify and shall have effect for such period as may be specified by the Minister.

REG 6

Results of sampling

6. (1) Each local authority shall establish and maintain a register of the results of sampling carried out under article 4.

(2) The register shall be kept at the offices of the local authority and shall be made available for inspection by any person during office hours.

FIRST SCHEDULE

Salmonid Waters

Column 1	Column 2	Column 3
Salmonid Water	Extent	River Aherlow Main channel
Argideen	Main channel	River Blackwater (Munster) Main channel
River Boyne	Main channel	River Bride Main channel
River Brown Flesk	Main channel	River Corrib, including Main channel and lake
Lough Corrib	River Dargle	Main channel
River Feale	Main channel	River Fergus Main channel
River Finn	Main channel	River Glashagh Main channel
River Lee	Main channel	from source to Cork City waterworks at Lee Road
River Leannan	Main channel	River Lurgy Main channel
River Maggisburn	Main channel	River Maine Main channel downstream of confluence with the River Brown Flesk
River Moy	Main channel	The following tributaries of the River Moy:— Owengarve, Mullaghanoe, Spaddagh, Trimoge, Glore, Yellow, Gwesstion, Manulla, Castlebar, Deel and Corry.
River Nore	Main channel	River Slaney Main channel
River Swilly	Main channel	River Vartry Main channel

SECOND SCHEDULE

Salmonid Water Quality Standards

Column 1	Column 2	Column 3	Parameter	Unit of Measurement
Standard	Temperature	°C	Temperature measured downstream of a point of thermal discharge (at the edge of the mixing zone as determined by the local authority) must not— (a) exceed the unaffected temperature by more than 1.5°C, (b) exceed— (i) 21.5°C, or (ii) 10°C, during the period from 1 November to 30 April where species which need cold water for reproduction are present.	A thermal discharge must not cause sudden variations in temperature. (Temperature limits to be conformed with for 98% of the time).
Dissolved Oxygen	mg/litre	O ₂	250% > 9	When the oxygen content falls below 6 mg/litre the local authority must prove that there will be no harmful consequence for the balanced development of the fish population.
pH	> 6 < 9	Artificial	pH variations with respect to the unaffected values shall not exceed ± 0.5 of a pH unit within the limits 6 and 9 provided that these variations do not increase the	

harmfulness of other substances present in the water. (Standard to be conformed with by 95% of samples over a period of 12 months where sampling is carried out at least once per month; where sampling is less frequent the standard shall be conformed with by all samples). Suspended Solids mg/litre >25 The standard is expressed as an average concentration over a period of 12 months and does not apply to suspended solids with harmful chemical properties. BOD 5 mg/litre $O_2 > 5$ Where weed or sewage fungus growths are excessive appropriate measures for control should be taken. (Standard to be conformed with by 95% of samples over a period of 12 months where sampling is carried out at least once per month; where sampling is less frequent the standard shall be conformed with by all samples). Nitrites mg/litre $NO_2 > 0.05$ (To be conformed with by 95% of samples over a period of 12 months where sampling is carried out at least once per month; where sampling is less frequent the standard shall be conformed with by all samples). Phenolic Compounds Phenolic compounds must not be present in such quantities that they adversely affect fish favour. Petroleum Hydrocarbons Petroleum products must not be present in such quantities that they:— form visible film face on the surface of the water or form coatings on the beds of water-courses and lakes — impart a detectable "hydrocarbon" taste to fish — produce harmful effects in fish. Non-ionized Ammonia mg/litre $NH_3 > 0.02$ (Standard may be exceeded in the form of minor peaks in daytime and, subject to this, be conformed with by 95% of samples over a period of 12 months where sampling is carried out at least once per month; where sampling is less frequent the standard shall be conformed with by all samples). Total Ammonium mg/litre $NH_4 > 1$ subject to conforming with the standard for non-ionized ammonia. (Standard to be conformed with by 95% of samples over a period of 12 months where sampling is carried out at least once per month; where sampling is less frequent the standard shall be conformed with by all samples). Total Residual Chlorine mg/litre $HOC_1 > 0.005$ (Standard to be conformed with by 95% of samples over a period of 12 months where sampling is carried out at least once per month; where sampling is less frequent the standard shall be conformed with by all samples). Total Zinc mg/litre Zn Water Hardness (mg/litre Ca CO_3) Standard $10 < 0.0350 < 0.2100 < 0.3500 < 0.5$ (Standard to be conformed with by 95% of samples over a period of 12 months where sampling is carried out at least once per month; where sampling is less frequent the standard shall be conformed with by all samples). Dissolved Copper mg/litre Cu Water Hardness (mg/litre Ca CO_3) Standard $10 < 0.00550 < 0.022100 < 0.04300 < 0.112$ (Standard to be conformed with by 95% of samples over a period of 12 months where sampling is carried out at least once per month; where sampling is less frequent the standard shall be conformed with by all samples).

THIRD SCHEDULE

Frequency of Sampling and Methods of Analysis and Inspection

Column 1	Column 2	Column 3	Parameter	Frequency and Manner of Sampling	Method of Analysis or Inspection
			Temperature	Weekly, both upstream and downstream of the point of thermal discharge.	Thermometry.
			Dissolved Oxygen	Monthly, minimum one sample representative of low oxygen conditions of the day of sampling. Winkler's method or specific electrodes (electro-chemical method). However, where major daily variations are suspected, a minimum of two samples in one day shall be taken.	pH
			Monthly	Electrometry calibration by means of two solutions	

with known pH values, preferably on either side of, and close to the pH being measured. Suspended Solids Monthly Filtration through a 0.45 µm filtering membrane, or centrifugation (five minutes minimum, average acceleration of 2800 to 3200g) drying at 105° C and weighing. BOD5 Monthly Determination of O₂ by the Winkler method before and after five days incubation in complete darkness at 20 ± 1°C (nitrification should not be inhibited). Nitrites Monthly Molecular absorption spectrophotometry. Phenolic Compounds Monthly where the presence of phenolic compounds is presumed. By tasting fish. Petroleum Hydrocarbons Monthly Visual, supplemented by tasting fish where the presence of hydrocarbons is presumed. Non-ionized Ammonia and Total Ammonium Monthly Molecular absorption spectrophotometry using indophenol blue or Nessler's method associated with pH and temperature determination. Total Residual Chlorine Monthly DPD-method (diethyl-p-phenylenediamine). Total Zinc Monthly Atomic absorption spectrometry. Dissolved Copper Monthly Atomic absorption spectrometry.

GIVEN under the Official Seal of the Minister for the Environment
this 18th day of November, 1988.

PÁDRAIG FLYNN,
Minister for the Environment.

EXPLANATORY NOTE.

These Regulations prescribe quality standards for salmonid waters and designate the waters to which they apply, together with the sampling programmes and the methods of analysis and inspection to be used by local authorities to determine compliance with the standards. The Regulations give effect to Council Directive No. 78/659/EEC of 18 July 1978, (O.J. No. L222/1, 14 August 1978) on the quality of fresh waters needing protection or improvement in order to support fish life.