



STATUTORY INSTRUMENTS.

S.I. No. 489 of 2011

EUROPEAN COMMUNITIES (TECHNICAL SPECIFICATIONS FOR
THE CHEMICAL ANALYSIS AND MONITORING OF WATER
STATUS) REGULATIONS, 2011

(Prn. A11/1781)

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I, PHIL HOGAN, Minister for the Environment, Community and Local Government, in exercise of the powers conferred on me by section 3 of the European Communities Act 1972 (No. 27 of 1972) and for the purpose of giving effect to Commission Directive 2009/90/EC¹ of 31 July 2009, hereby make the following Regulations:

Citation, commencement and application

1. These Regulations may be cited as the European Communities (Technical Specifications for the Chemical Analysis and Monitoring of Water Status) Regulations, 2011.

2. These Regulations shall come into effect on 27th September 2011, save as is otherwise provided in relation to any particular provision.

Interpretation

3. (1) In these Regulations—

“the 2003 Regulations” means the European Communities (Water Policy) Regulations 2003 (S.I. No. 722 of 2003);

“the Agency” means the Environmental Protection Agency;

“the Directive” means Commission Directive 2009/90/EC of 31 July 2009, unless otherwise specified;

“Directive 2000/60/EC” means Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000²;

“limit of detection” means the output signal or concentration value above which it can be affirmed, with a stated level of confidence that a sample is different from a blank sample containing no determinand of interest;

“limit of quantification” means a stated multiple of the limit of detection at a concentration of the determinand that can reasonably be determined with an acceptable level of accuracy and precision. The limit of quantification can be calculated using an appropriate standard or sample, and may be obtained from the lowest calibration point on the calibration curve, excluding the blank;

¹OJ No. L201/36, 01.08.2009

²OJ No. L327/1, 22.12.2000

*Notice of the making of this Statutory Instrument was published in
“Iris Oifigiúil” of 30th September, 2011.*

“relevant public authorities” means the authorities and other public bodies listed in the First Schedule of the European Communities (Water Policy) Regulations, 2003 (S.I. No. 722 of 2003) which have been assigned a duty of monitoring under a programme of monitoring prepared pursuant to Regulation 10 of those regulations;

“uncertainty of measurement” means a non-negative parameter characterising the dispersion of the quantity values being attributed to a measurand, based on the information used.

(2) A word or expression that is used in these Regulations and is also used in Commission Directive 2009/90/EC has, unless the contrary intention appears, the same meaning in these Regulations as it has in that Directive.

Purpose and scope of the Regulations

4. These Regulations lay down technical specifications for chemical analysis and monitoring of water status in accordance with Article 8(3) of Directive 2000/60/EC. They establish minimum performance criteria for methods of analysis to be applied by public authorities assigned a duty of monitoring by the Agency under Regulation 10 of the 2003 Regulations when monitoring water status, sediment and biota, as well as rules for demonstrating the quality of analytical results.

Methods of analysis

5. The Agency and the relevant public authorities assigned a duty of monitoring under a programme of monitoring prepared pursuant to Regulation 10 of the 2003 Regulations shall ensure that all methods of analysis, including laboratory, field and on-line methods, used for the purposes of chemical monitoring programmes carried out under Directive 2000/60/EC are validated and documented in accordance with EN ISO/IEC-17025 standard or other equivalent standards accepted at international level.

Minimum performance criteria for methods of analysis

6. The Agency and the relevant public authorities assigned a duty of monitoring under a programme of monitoring prepared pursuant to Regulation 10 of the 2003 Regulations shall ensure that the minimum performance criteria for all methods of analysis applied are based on an uncertainty of measurement of 50 % or below ($k = 2$) estimated at the level of relevant environmental quality standards and a limit of quantification equal or below a value of 30 % of the relevant environmental quality standards.

7. In the absence of a relevant environmental quality standard for a given parameter, or in the absence of a method of analysis meeting the minimum performance criteria set out in Regulation 6, the Agency and the relevant public authorities shall ensure that monitoring is carried out using best available techniques not entailing excessive costs.

Calculation of mean values

8. (1) In all methods of analysis for the purposes of the Directive, as well as for the purpose of classifying water status as assigned by the 2003 Regulations, the Agency and the relevant public authorities shall ensure that;

- (a) where the amounts of physico-chemical or chemical measurands in a given sample are below the limit of quantification, the measurement results shall be set to half of the value of the limit of quantification concerned for the calculation of mean values;
- (b) where a calculated mean value of the measurement results referred to in subparagraph (a) is below the limits of quantification, the value shall be referred to as “less than limit of quantification”.

(2) Subparagraph (a) shall not apply to measurands that are total sums of a given group of physico-chemical parameters or chemical measurands, including their relevant metabolites, degradation and reaction products. In those cases, results below the limit of quantification of the individual substances shall be set to zero.

Quality assurance and control

9. Laboratories, or parties contracted by laboratories carrying out analyses for the purpose of Regulation 10 of the 2003 Regulations, shall apply quality management system practices in accordance with ISO/IEC-17025 or other equivalent standards accepted at international level.

10. Laboratories or parties contracted by laboratories shall demonstrate their competences in analysing relevant physico-chemical or chemical measurands by;

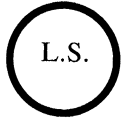
- (a) participation in proficiency testing programmes covering the methods of analysis referred to in Regulation 5 of measurands at levels of concentrations that are representative of chemical monitoring programmes carried out pursuant to Regulation 10 of the 2003 Regulations, and,
- (b) analysis of available reference materials that are representative of collected samples which contain appropriate levels of concentrations in relation to relevant environmental quality standards referred to in Regulation 6.

11. (1) The proficiency testing programmes referred to in Regulation 10 shall be organised by accredited organisations or internationally or nationally recognised organisations which meet the requirements of ISO/IEC Guide 43-1 or of other equivalent standards accepted at international level.

(2) The results of participation in those programmes shall be evaluated on the basis of the scoring systems set out in ISO/IEC Guide 43-1 or in the ISO-13528 standard or in other equivalent standards accepted at international level.

Guidance on implementation

12. The Agency may, where it considers it necessary, prepare and publish technical guidance on the application of these Regulations, taking account of relevant EU guidance.



GIVEN under my Official Seal,
27 September 2011.

PHIL HOGAN,
Minister for the Environment, Community and Local
Government.

EXPLANATORY NOTE

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

These regulations transpose European Commission Directive 2009/90/EC, on quality control and quality assurance of water sampling and analysis, into Irish law. They lay down rules and procedures for laboratories testing water samples for water quality in pursuance of requirements under the Water Framework Directive³. Specifically, the regulations require authorities charged with testing/analysis of water samples to conform with standards of the International Standards Organisation, or equivalent. They also lay down minimum performance criteria for methods of analysis.

³Directive 2000/60/EC of the European Parliament and the Council

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CONTAE MHAIGH EO,
(Teil: 01 - 6476834 nó 1890 213434; Fax: 094 - 9378964 nó 01 - 6476843)
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