STATUTORY RULES OF NORTHERN IRELAND

2014 No. 208

EUROPEAN COMMUNITIES

ENVIRONMENTAL PROTECTION

The Groundwater (Amendment) Regulations (Northern Ireland) 2014

Made - - - -	*4th July 2014*
Coming into operation -	*31st July 2014*

The Department of the Environment, being a Department designated (**a**) for the purposes of section 2(2) of the European Communities Act 1972(**b**) in relation to the environment, makes the following Regulations in exercise of the powers conferred by that section.

Citation, commencement and interpretation

1. These Regulations may be cited as the Groundwater (Amendment) Regulations (Northern Ireland) 2014 and shall come into operation on 31st July 2014.

2. The Interpretation Act (Northern Ireland) 1954(**c**) applies to these Regulations as it applies to an Act of the Assembly.

Amendments to the Groundwater Regulations (Northern Ireland) 2009

3. The Groundwater Regulations (Northern Ireland) 2009(**d**) are amended in accordance with regulations 4 to 12.

Amendment of regulation 2

4. In regulation 2 (interpretation)—

(a) in paragraph (1)—

(i) after the definition of "authorisation" insert—

""background level" means the concentration of a substance or the value of an indicator in a body of groundwater corresponding to no, or only very minor, anthropogenic alterations to undisturbed conditions;

"baseline level" means the average value measured at least during the reference years 2007 and 2008 on the basis of monitoring in accordance with a programme prepared under regulation 9 of The Water Environment (Water Framework Directive) Regulations (Northern Ireland) 2003;";

(**a**) S.I. 2008/301
(**b**) 1972 c.68
(**c**) 1954 c.33 (N.I.)
(**d**) S.R. 2009/254

(ii) after the definition of "groundwater" insert—

""groundwater quality standard" means an environmental quality standard expressed as the concentration of a particular pollutant, group of pollutants or indicator of pollution in groundwater, which should not be exceeded in order to protect human health and the environment;";

(iii) after the definition of "river basin district and international river basin districts" insert—

""significant and sustained upward trend" means any statistically and environmentally significant increase of concentration of a pollutant, group of pollutants, or indicator of pollution in groundwater for which trend reversal is identified as being necessary in accordance with regulation 10;";

(iv) after the definition of "starting point" insert—

""threshold value" means a groundwater quality standard established under regulation 8;".

(b) delete paragraph 3.

Amendment of regulation 7

5. For regulation 7 (general duty in the Neagh Bann, North Western and Shannon International River Basin Districts) substitute—

"**General Duty in the Neagh Bann, North Western and Shannon International River Basin Districts**

7. In discharging its functions in compliance with these Regulations the Department shall cooperate, in accordance with Article 3(4) of the Water Framework Directive, with the Government Department in Ireland having responsibility for corresponding functions, so as to secure that the assessment of groundwater chemical status, the establishment of threshold values, identification of significant and sustained upward trends and determination of the starting point for trend reversal is co-ordinated for the whole of the international river basin districts."

Amendment of regulation 8

6.—(1) In paragraph 1 of regulation 8(threshold values) after the word "Department." insert the words "The Department may derive threshold values at the national level, level of the river basin district or at the level of a body or a group of bodies of groundwater"

(2) In regulation 8(5) after the word "values" insert the words "listed in Schedule".

(3) After regulation 8(5) insert—

"(6) Where any threshold value is breached and subsequent monitoring is performed–

(a) the body of groundwater should not be classed as good chemical status if both (a) the average of all the monitoring results from all the monitoring points representative of the risk to the quality of the groundwater exceeds the threshold value; and (b), additionally, the concentration of the pollutant to which the threshold value applies exceeds the maximum concentration allowed for it in drinking water in at least one sample from an appropriately representative monitoring point;

(b) the body of groundwater should not be classed as good chemical status if (i) the threshold values is exceeded across any plume of pollutants extending for over 2 square kilometres or more; and (ii) the maximum concentration allowed in drinking water for any of the pollutants in the plume is exceeded in at least part of the plume.

(7) The Schedule has effect.".

Amendment of regulation 9

7. For regulation 9 (criteria for assessing groundwater chemical status) substitute—

"**Criteria and Procedure for assessing groundwater chemical status**

9.—(1) The Department shall apply the approach in the relevant provisions of the Directive and the Water Framework Directive when assessing groundwater chemical status.

(2) The relevant provisions of the Directive for the purposes of subparagraph (1) are—

(a) Article 3(1)(a) and (b);

(b) Article 3(6);

(c) Article 4(1), 4(2) and 4(3);

(d) Annex I;

(e) Annex II; and

(f) paragraphs 1 to 4 of Annex III.

(3) The relevant provisions of the Water Framework Directive for the purposes of subparagraph (1) are in section 2.3 of Annex V.

(4) Diffuse sources of pollution having an impact on groundwater chemical status must be taken into account whenever technically possible."

Amendment of regulation 10

8.—(1) In paragraph (1) of regulation 10 (significant and sustained upward trends and the starting point for trend reversal) after the word "shall" insert ", in accordance with Annex IV to the Directive".

(2) In paragraph (6) remove "paragraph 1 of".

(3) After paragraph (6) insert—

"(6A) For the identification of significant and sustained upward trends in the concentration of substances which cover both naturally and as a result of human activities the Department must consider the baseline levels and, where such data is available, the data collected before the start of the monitoring programme in order to report on trend identification within the first river basin management plan referred to in Article 13 of the Water Framework Directive.".

Amendment of regulation 14

9. For regulation 14 (preventing the input of hazardous substances into groundwater) substitute—

"Measures to prevent the input of hazardous substances into groundwater

14.—(1) The Department shall, in granting an authorisation, take all necessary measures to prevent the input of any hazardous substance into groundwater.

(2) Each programme of measures established under regulation 11 of The Water Environment (Water Framework Directive) Regulations (Northern Ireland) 2003 must include measures to prevent the input of hazardous substances into groundwater.".

Amendment of regulation 15

10. For regulation 15(limiting the input of non hazardous pollutants into groundwater) substitute—

"**Measures to limit the input of non-hazardous pollutants into groundwater**

15.—(1) The Department shall, in granting an authorisation, take all necessary measures to limit the input of non-hazardous pollutants into groundwater so as to ensure that such inputs do not cause pollution in groundwater.

(2) Each programme of measures established under regulation 11 of The Water Environment (Water Framework Directive) Regulations (Northern Ireland) 2003 must include measures to limit the input of non-hazardous pollutants into groundwater".

Amendment of regulation 16

11.—(1) In regulation 16(discharges that may be authorised) after the word "Directive" insert "and without prejudice to any more stringent requirement in EU legislation.".

Insertion of Schedule

12. A Schedule shall be inserted into the Groundwater Regulations (Northern Ireland) 2009 as follows:

"

SCHEDULE

Regulation 8

Groundwater Threshold Values

Table 1

Threshold values for assessing groundwater chemical status

Parameter	*Unit*	*To examine if groundwater abstraction is causing saline or other intrusions*	*To examine if groundwater is providing a significant contribution to the failure of the environmental objectives of associated surface water bodies*	*To examine if the quality of groundwater that is abstracted for potable use is deteriorating, possibly resulting in a need for increased purification*	*To examine the spatial extent of a groundwater body or group of bodies that are exceeding an EU Standard or threshold value*
Ammonium	mg/l				0.29
Arsenic	µg/l				7.5
Atrazine	µg/l				0.075
Cadmium	µg/l				3.75
Chloride	mg/l	25			
Electrical Conductivity	µS/cm	800		1875	
Lead	µg/l				18.8
MCPA	µg/l				0.075
Mecoprop	µg/l				0.075
Mercury	µg/l				0.75
Nitrate (as $NO_{3)}$	mg/l			37.5	37.5
Simazine	µg/l				0.075

Sulphate	mg/l				187.5
Tetrachloroethylene	µg/l			7.5	7.5
Trichloroethylene	µg/l			7.5	7.5
Any pollutant in relation to which a surface water environmental standard has been set[(1)]			0.5 x (surface water standard divided by dilution factor)[(2)]		

[(1)] The surface water environmental standards are set out in Schedule 1 to The Water Framework Directive (Priority Substances and Classification) Regulations (Northern Ireland) 2011(S.R. 2011 No. 10)

[(2)] The "dilution factor" is taken to be the fraction of the average annual river flow derived from groundwater inflows. It can be estimated from established hydrological indices such as the baseflow index, or from the ratio of catchment groundwater recharge to effective precipitation.

Table 2

Threshold values for assessing the risk to wetlands

Column header	Annual mean nitrate concentration (mg/l NO_3)		
	Altitude Above Ordnance Datum		
Wetland type	*up to 175 metres*	*more than 175 metres*	*any*
Quaking bog	18	4	
Wet dune			13
Fen (mesotrophic) and Fen Meadow	22	9	
Fen (oligotrophic and wetlands at tufa forming springs)	20	4	
Wet grassland	26	9	
Wet heath	13	9	
Peatbog and woodland on peatbog			9
Wetland directly irrigated by spring or seepage			9
Swamp (mesotrophic) and reedbed			22
Swamp (oligotrophic)			18
Wet woodland	22	9"	

Sealed with the Official Seal of the Department of the Environment on 4th July 2014

L.S.

Wesley Shannon
A senior officer of the Department of the Environment

EXPLANATORY NOTE

(This note is not part of the Regulations)

These Regulations amend the Groundwater Regulations (Northern Ireland) 2009 in the following ways.

Regulation 2 is amended to include key definitions contained in the Groundwater Directive.

Regulation 7 is amended to clarify that the Department will cooperate with the relevant Government Department in Ireland in establishing threshold values for groundwater.

Regulation 8 is amended to clarify the levels at which threshold values may be established and the criteria for classifying a groundwater body as poor following a breach of a threshold value.

Regulation 9 is amended to set out the relevant provisions of the Groundwater and Water Framework Directives which are used for assessing groundwater chemical status.

Regulation 10 is amended so baseline levels and other requirements are considered when identifying significant and sustained upward trends.

Regulation 12 is added to insert a Schedule into the Regulations to set out the threshold values that will be used to assess groundwater chemical status.

Regulations 14 and 15 are amended to require the Department to include measures to prevent and limit the input of hazardous substances and non-hazardous pollutants into groundwater within the programme of measures included in the River Basin Management Plans established under the Water Framework Directive.

Regulation 16 is amended to prevent prejudice to any more stringent requirements in EU Legislation.

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