#### STATUTORY RULES OF NORTHERN IRELAND

## 2009 No. 254

## Groundwater Regulations (Northern Ireland) 2009

## PART 1

#### Introduction

#### Citation and commencement

**1.** These Regulations may be cited as the Groundwater Regulations (Northern Ireland) 2009 and shall come into operation on 10 August 2009.

#### Interpretation

2.—(1) In these Regulations—

"the Appeals Commission" means the Water Appeals Commission for Northern Ireland;

"authorisation" means any of the following in so far as they relate to groundwater—

- (a) an authorisation under regulation 19;
- (b) a discharge consent under Article 7A of The Water (Northern Ireland) Order 1999(1) (as inserted by Article 280 of the Water & Sewerage Services (Northern Ireland) Order 2006)(2);
- (c) an authorisation under Article 6 of the Industrial Pollution Control (Northern Ireland) Order 1997(3) in relation to a process designated for integrated central control under Article 3 of that Order;
- (d) a permit under the Pollution Prevention and Control Regulations (Northern Ireland) 2003(4) in so far as it authorises the operation of a Part A installation or a Part A mobile plant within the meaning of those Regulations;
- (e) a waste management licence, existing disposal licence or existing resolution of a district council;
- (f) the registration of mobile radioactive apparatus under section 10 of the Radioactive Substances Act 1993(5); or
- (g) an authorisation for disposal in accordance with section 13 of the Radioactive Substances Act 1993;

<sup>&</sup>quot;the Department" means the Department of the Environment;

<sup>&</sup>quot;direct input" in relation to groundwater means the introduction of a pollutant into groundwater without percolation through soil or subsoil;

<sup>(1)</sup> S.I. 1999/662 (N.I.6)

<sup>(2)</sup> S.I. 2006/3336 (N.I.21).

<sup>(3)</sup> S.I. 1997/.2777 (N.I.18).

<sup>(4)</sup> S.R. 2003 No.46

<sup>(5) 1993</sup> c.12.

"the Directive" means Council Directive 2006/118/EC of 12 December 2006 on the protection of groundwater against pollution and deterioration(6);

"existing disposal licence" and "existing resolution of a district council" shall have the meanings given by Article 47(1) of the Waste and Contaminated Land (Northern Ireland) Order 1997(7);

"groundwater" means all water which is below the surface of the ground in the saturation zone and in direct contact with the ground or subsoil;

"indirect input" in relation to groundwater means the introduction of a pollutant into groundwater after percolation through soil or subsoil;

"pollutant" means any substance liable to cause pollution;

"pollution" means the direct or indirect introduction, as a result of human activity, of substances or heat into air, water or land which may be harmful to human health or the quality of aquatic ecosystems or terrestrial ecosystems directly depending on aquatic ecosystems, which result in damage to material property, or which impair or interfere with amenities and other legitimate uses of the environment;

"river basin district and international river basin districts" mean—

- an area identified by regulation 4(1) of the Water Environment (Water Framework Directive) Regulations (Northern Ireland) 2003(8), being the main unit for the management of river basins for the purposes of the Water Framework Directive and being made up of a river basin or neighbouring river basins, together with associated groundwater, transitional waters and coastal water;
- (i) the North Eastern River Basin District; or
- the Neagh Bann, North Western and Shannon International River Basin Districts:

"starting point" in relation to trend reversal means the point at which measures must be implemented to reverse a significant and sustained upward trend in pollutant concentrations or indicators of pollution identified under regulation 10(1)(a);

"waste management licence" means a waste management licence issued under the Waste and Contaminated Land (Northern Ireland) Order 1997; and

"the Water Framework Directive" means Directive 2000/60/EC of the European Parliament and of the Council of 23rd October 2000 establishing a framework for Community action in the field of water policy(9).

- (2) Any expression used in both these Regulations, the Directive and the Water Framework Directive and not otherwise defined in these Regulations has the same meaning for the purposes of these Regulations as it has for the purposes of the Directive.
- (3) References in the Directive to "threshold values", "threshold values established in accordance with Article 3 and Annex II" and "threshold values established pursuant to Article 3" shall be taken to be references to threshold values approved by the Department of the Environment.
- (4) The Interpretation Act (Northern Ireland) 1954(10) shall apply to these Regulations as it applies to an Act of the Assembly.

<sup>(6)</sup> OJ No.L372, 27.12.2006, p.19

<sup>(7)</sup> S.I. 1997/2778 (N.I.19)

<sup>(8)</sup> S.R. 2003 No.544

<sup>(9)</sup> OJ No.L327, 22.12.2000,p.1as last amended by Directive 2008/32/EC of the European Parliament and of the Council (OJ No.L81,20.3.2008, p.60)

<sup>(10) 1954</sup> c. 33 (N.I.)

#### Meaning of "hazardous substance"

- **3.**—(1) A hazardous substance is any substance or group of substances that are toxic, persistent and liable to bio-accumulate.
- (2) This includes in particular the following when they are toxic, persistent and liable to bio-accumulate—
  - (a) organohalogen compounds and substances which may form such compounds in the aquatic environment;
  - (b) organophosphorous compounds;
  - (c) organotin compounds;
  - (d) substances and preparations, or the breakdown products of such substances and preparations, which have been proved to possess carcinogenic or mutagenic properties or properties which may affect steroidgenic, thyroid, reproduction or other endocrine-related functions in or via the aquatic environment;
  - (e) persistent hydrocarbons and persistent and bioaccumulable organic toxic substances;
  - (f) cyanides;
  - (g) metals (in particular cadmium and mercury) and their compounds;
  - (h) arsenic and its compounds;
  - (i) biocides and plant protection products.

### Meaning of "non-hazardous pollutant"

**4.** A non-hazardous pollutant is any pollutant other than a hazardous substance.

## **Exceptions**

**5.** These Regulations do not apply in relation to the consequences of accidents or exceptional circumstances of natural cause that could not reasonably have been foreseen, avoided or mitigated.

#### **Exemptions granted by the Department**

- **6.** The Department may exempt from the requirement for an authorisation, in any specific case or class of case, a discharge or activity that would result in—
  - (a) an input of a pollutant into groundwater of a quantity and concentration so small as to obviate any present or future danger of deterioration in the quality of the receiving groundwater;
  - (b) an input of a pollutant into groundwater that, for technical reasons, is incapable of being prevented or limited without using—
    - (i) measures that would increase risks to human health or to the quality of the environment as a whole; or
    - (ii) disproportionately costly measures to remove quantities of pollutants from, or otherwise control their percolation in, contaminated ground or subsoil.
  - (2) The Department shall record all exemptions under this regulation.

## PART 2

#### Groundwater assessment

# 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 co-operate with the Government Department in Ireland having responsibility for corresponding functions, so as to secure that the assessment of groundwater chemical status, 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.

#### Threshold values

- **8.**—(1) A list of threshold values must be derived in accordance with Parts A and B of Annex II to the Directive on the basis of methodologies approved by the Department.
- (2) The Department shall amend the list of threshold values whenever new information indicates that a threshold value should be set for an additional substance, that an existing threshold value should be amended, or that a threshold value previously removed from the list should be reinserted, in order to protect human health and the environment.
- (3) Where in the opinion of the Department a body of groundwater is no longer at risk from a pollutant, group of pollutants or indicator of pollution, the Department may revoke the threshold value for that pollutant, group of pollutants or indicator of pollution.
- (4) The Department shall supply to the Government Department in Ireland having responsibility for corresponding functions, copies of proposals under this paragraph relating to threshold values for bodies of groundwater associated with the Neagh Bann, North Western and Shannon International River Basin Districts.
- (5) The Department shall apply the threshold values for the purposes of assessing groundwater chemical status and determining the starting point for trend reversal.

#### Criteria for assessing groundwater chemical status

- **9.**—(1) The Department shall apply the approach in the relevant provisions of the Directive when assessing groundwater chemical status.
  - (2) The relevant provisions of the Directive for the purposes of sub-paragraph (1) are—
    - (a) Article 4(1) and (2); and
    - (b) paragraphs 1 to 4 of Annex III.

## Significant and sustained upward trends and the starting point for trend reversal

- 10.—(1) Subject to sub-paragraph (8), for the purposes of giving effect to paragraphs 2.4.4 and 2.4.5 of Annex V to the Water Framework Directive, the Department shall, in relation to each body or group of bodies of groundwater that it has characterised as being at risk of failing to meet the objectives under Article 4 of that Directive—
  - (a) identify any significant and sustained upward trend in pollutant concentrations, groups of pollutants or indicators of pollution; and
  - (b) determine the starting point for reversal of each trend so identified.

- (2) A body of groundwater shall be treated as being subject to a significant and sustained upward trend where it is subject to a statistically significant increase of concentrations of a pollutant, group of pollutants or indicator of pollution, which represents a significant environmental risk.
- (3) The Department shall base the assessment of whether a body of groundwater is subject to a significant and sustained upward trend on information from the sources specified in subparagraph (4),assessed in accordance with paragraph 2(c) and (d) of Part A of Annex IV to the Directive.
  - (4) The sources mentioned in sub-paragraph (3) are—
    - (a) monitoring programmes for groundwater—
      - (i) established under the provisions specified in sub-paragraph (9); and
      - (ii) designed in accordance with the requirements of those provisions and paragraphs 1 and 2(a) and (b) of Part A of Annex IV to the Directive; and
    - (b) for the purposes of identifying trends for the first river basin management plan, any data deemed relevant by the Department and gathered before the start of the monitoring programmes under sub-paragraph (4)(a).
- (5) The Department shall carry out an additional trend assessment in the circumstances described in Article 5(5) of the Directive in order to verify that a plume of pollution from a contaminated site does not—
  - (a) expand;
  - (b) cause a deterioration in the chemical status of a body or group of bodies of groundwater; or
  - (c) present a risk to human health or the environment.
- (6) The starting point for trend reversal must be determined in accordance with Article 5(3) and paragraph 1 of Part B of Annex IV to the Directive.
- (7) On 22 December 2015 and on each sixth anniversary thereafter, the Department shall review and where necessary revise its determination made under sub-paragraph (1).
- (8) In relation to pollutants or indicators of pollution for which insufficient information is available to identify significant and sustained upward trends and determine starting points for trend reversal by a date to be determined by the Department, the Department shall comply with subparagraph (1) as soon as possible after that date.
- (9) The provisions specified in this sub-paragraph are those contained in regulation 9 of the Water Environment (Water Framework Directive) Regulations (Northern Ireland) 2003.

#### Information to be included in a river basin management plan

- 11.—(1) The Department shall ensure each river basin management plan and each revised river basin management plan it prepares under the provision specified in sub-paragraph (2) includes, in relation to the river basin district—
  - (a) details of approved threshold values together with the information specified in Part C of Annex II to the Directive;
  - (b) in the case of a revised river basin management plan, details of any applicable changes to the list of threshold values since the date of publication of the previous version of the plan;
  - (c) a summary of each assessment undertaken for the purposes of determining groundwater chemical status, including an explanation as to the manner in which exceedences of groundwater quality standards or threshold values at individual monitoring points have been taken into account;
  - (d) a summary of the information specified in Article 5(4)(a) of the Directive;

- (e) details of each starting point for trend reversal determined under regulation 10(1)(b) or, as the case may be, regulation 10(7), together with a summary of the reasons for each determination; and
- (f) a summary of the results of any additional trend assessments carried out under regulation 10(5).
- (2) The provision specified in this sub-paragraph is regulation 12(1) and (2) of the Water Environment (Water Framework Directive) Regulations (Northern Ireland) 2003.

## PART 3

#### Authorisations

#### Granting an authorisation

- 12. The Department shall, for the purposes of implementing—
  - (a) the Water Framework Directive; or
  - (b) the Directive,

comply with these Regulations in exercising their functions in relation to authorisations.

## Review of existing disposal licences and existing resolutions of a District Council

- **13.** The Department shall review all existing disposal licences and all existing resolutions which authorise—
  - (a) any disposal of a hazardous substance or non-hazardous pollutant which might lead to an indirect discharge into groundwater of such a substance or pollutant; or
- (b) a direct discharge into groundwater of a hazardous substance or non-hazardous pollutant; and shall, so far as may be necessary to give effect to Council Directive 80/68/EEC(11) in exercise of its powers under Articles 47(2) and (3) of the Waste and Contaminated Land (Northern Ireland) Order 1997 apply Articles 10 and 12 of that Order (variation and revocation, etc. of licences) in relation to any such authorisation.

#### Preventing the input of hazardous substances into groundwater

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

#### Limiting the input of non-hazardous pollutants into groundwater

15. 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.

#### Discharges that may be authorised

**16.** Nothwithstanding regulations 14 and 15, provided it does not compromise the achievement of any of the environmental objectives relating to groundwater in Article 4 of the Water Framework Directive, the Department may grant an authorisation for—

- (a) the injection of water containing substances resulting from the operations for exploration and extraction of hydrocarbons or mining activities, and injection of water for technical reasons, into geological formations from which hydrocarbons or other substances have been extracted or into geological formations which for natural reasons are permanently unsuitable for other purposes, provided that the injection does not contain substances other than those resulting from the above operations;
- (b) the reinjection of pumped groundwater from mines and quarries or associated with the construction or maintenance of civil engineering works;
- (c) the injection of natural gas or liquefied petroleum gas for storage purposes into geological formations which for natural reasons are permanently unsuitable for other purposes;
- (d) the injection of natural gas or liquefied petroleum gas for storage purposes into other geological formations where there is an overriding need for security of gas supply, and where the injection is such as to prevent any present or future danger of deterioration in the quality of any receiving groundwater;
- (e) construction, civil engineering and building works and similar activities on, or in the ground which come into contact with groundwater;
- (f) discharges of small quantities of substances for scientific purposes for characterisation, protection or remediation of water bodies limited to the amount strictly necessary for the purposes concerned;
- (g) reinjection into the same aquifer of water used for geothermal purposes;
- (h) inputs of pollutants that are the result of—
  - (i) interventions in surface waters for the purposes, amongst others, of mitigating the effects of floods and droughts, and for the management of waters and waterways;
  - (ii) artificial recharge or augmentation of groundwater bodies for the purposes of groundwater management.

#### Authorisations generally

- 17.—(1) When the Department receives an application for an authorisation that might lead to the discharge of a pollutant, it must ensure that all necessary investigations have been carried out to ensure that it grants any authorisation in accordance with regulation 14 or 15.
- (2) If it grants an authorisation, it must include conditions requiring all necessary technical precautions to be observed to ensure the objectives of regulations 14 and 15 are achieved.
  - (3) An authorisation may not be granted without examination of—
    - (a) the hydrogeological conditions of the area concerned;
    - (b) the possible purifying powers of the soil and subsoil; and
    - (c) the risk of pollution and alteration of the quality of the groundwater from the discharge,

and without establishing whether the input of pollutants into groundwater is a satisfactory option in the best interests of the environment.

(4) An authorisation may only be granted if the Department has checked that the groundwater (and, in particular, its quality) will undergo the requisite investigations under (1).

## **Review of authorisations**

**18.**—(1) All authorisations granted before the coming into operation of these Regulations shall be reviewed before 22nd December 2012 and may be reviewed at any time after that.

- (2) The Department shall on review assess compliance with the conditions of any such authorisation and the effects on groundwater.
- (3) If the conditions of any such authorisation are not complied with, enforcement action shall be taken to ensure compliance and, if necessary, the revocation of the authorisation.

#### PART 4

Discharge of a hazardous substance or non-hazardous pollutant

#### Discharge of a hazardous substance or non-hazardous pollutant

- 19.—(1) It is an offence to cause or knowingly permit the discharge of any hazardous substance or non-hazardous pollutant in circumstances that might lead to an indirect input of that hazardous substance or non-hazardous pollutant into groundwater unless it is carried out under and in accordance with an authorisation granted by the Department under this regulation.
  - (2) Sub paragraph (1) does not apply to—
    - (a) a discharge that requires a discharge consent within the meaning of Article 7A of the Water (Northern Ireland) Order 1999;
    - (b) a disposal licence under Article 7 of the Pollution Control and Local Government (Northern Ireland) Order 1978(12);
    - (c) a licence granted under Part II of the Food and Environment Protection Act 1985(13);
    - (d) an authorisation granted under the Industrial Pollution Control (Northern Ireland) Order 1997;
    - (e) a waste management licence granted under the Waste and Contaminated Land (Northern Ireland) Order 1997;
    - (f) a permit granted under regulations under Article 4 of the Environment (Northern Ireland) Order 2002(14);
    - (g) Article 226 of the Water and Sewerage Services (Northern Ireland) Order 2006;
    - (h) any statutory order which expressly confers power to discharge effluent into water;
    - (i) any prescribed statutory provision;
    - (j) a disposal that requires an authorisation under section 13 of the Radioactive Substances Act 1993; or
    - (k) the keeping or use of mobile radioactive apparatus that requires a registration under section 10 of that Act.
- (3) An operator of a road drain does not commit an offence under this regulation unless the Department has served a notice on that person under regulation 25 in relation to that discharge, and the person has failed to comply with that notice.
- (4) In this regulation a "road drain" means a drain which the Department is entitled to keep open by virtue of Article 45 of the Roads (Northern Ireland) Order 1993(15).

<sup>(12)</sup> S.I. 1978/1049 (N.I.19)

<sup>(13) 1985</sup> c.48

<sup>(14)</sup> S.I. 2002/3153 (N.I.7)

<sup>(15)</sup> S.I. 1993/3160 (N.I.15)

#### Application of the Water (Northern Ireland) Order 1999

- **20.**—(1) Article 10 of the Water (Northern Ireland) Order 1999 (relationship with other statutory provisions controlling pollution), (as inserted by Article 281 of The Water and Sewerage Services (Northern Ireland) Order 2006), applies in relation to an authorisation under regulation 19.
- (2) Article 11 of the Water (Northern Ireland) Order 1999 (power to make scheme of charges), (as amended by Article 282 of The Water and Sewerage Services (Northern Ireland) Order 2006), applies in relation to an authorisation under regulation 19 as if any reference to a discharge consent included a reference to such an authorisation.

#### Transfer of an authorisation under regulation 19

- **21.** Paragraph 8 of Schedule 1 to the Water (Northern Ireland) Order 1999 (transfer of consents) applies in relation to an authorisation under regulation 19 as if—
  - (a) any reference to a consent included a reference to such an authorisation;
  - (b) references to paragraphs 2 and 4 of that Schedule were references to regulation 19; and
  - (c) references to carrying on or making discharges were references to carrying on the activities regulated by the authorisation.

#### Grant of an authorisation under regulation 19

- 22.—(1) An application for an authorisation under regulation 19 shall be made to the Department.
- (2) If in any case the Department considers that there are special reasons why the application should be advertised, it may require the applicant to advertise the application in a specified manner.
  - (3) An authorisation may be granted subject to conditions.
  - (4) If the Department refuses an authorisation it must give its reasons.
- (5) The Department may, by notice in writing, at any time vary or revoke an authorisation, but the notice must give the Department's reasons.
  - (6) A revocation does not have effect until 3 months from the date of the notice.

## Appeals against refusal, variation or revocation of an authorisation

- **23.**—(1) A person may within 28 days of the date of an authorisation, or within 28 days of the date of any notice to vary, revoke or refuse to grant an authorisation appeal by notice in writing against any condition of the authorisation, or against the variation, revocation or refusal to grant an authorisation to the Appeals Commission.
- (2) Any decision taken by the Department under regulation 22 shall have effect pending the outcome of an appeal under sub-paragraph (1).

#### PART 5

#### Enforcement and penalties

#### Power to require the provision of information

**24.**—(1) For the purposes of discharging its functions under these Regulations, the Department may, by notice served on any person, require that person to provide, in such form and within such period as is specified in the notice, the information specified in the notice.

- (2) A notice may require a person to provide any information where that requirement is reasonable, including the provision of information—
  - (a) not in the person's possession; and
  - (b) which would not usually come into the person's possession.
  - (3) Failure to comply with a notice served by the Department under (1) is an offence.

## Notice to prevent or control the input of hazardous substance or non-hazardous pollutant

- **25.**—(1) Where—
  - (a) any person is carrying on, or proposing to carry on, any activity on or in the ground; and
  - (b) that activity might lead to the input into groundwater of any hazardous substance or non-hazardous pollutant,

the Department may serve notice in writing on that person prohibiting the carrying on of that activity, or granting an authorisation to carry on that activity subject to such conditions as are specified in the notice.

- (2) The Department may at any time, by notice in writing, vary or revoke that notice and a notice of variation or revocation shall state the Department's reasons.
- (3) Breach of a notice or failure to comply with any condition of a notice served by the Department under (1) is an offence.

#### Appeals against notices

- **26.**—(1) Any person who is aggrieved by a notice under regulation 25 may appeal by notice in writing to the Appeals Commission within 28 days from the date of the notice.
  - (2) The Appeals Commission may cancel or confirm the notice, with or without changes.
  - (3) The notice must be complied with pending the outcome of the appeal.

#### **Codes of practice**

- 27.—(1) The Department may approve for the purposes of these Regulations codes of practice issued for the purpose of giving practical guidance to persons engaged in any activity that may result in discharging hazardous substances or non-hazardous pollutants on the steps they should take to prevent such substances or pollutants from entering groundwater.
- (2) The Department shall take into account whether or not such a code of practice is being or is likely to be complied with before taking any enforcement action under these Regulations.
  - (3) A code of practice shall be publicised as the Department sees fit.

#### Particulars to be included in registers

- **28.**—(1) The Department shall, as soon as reasonably practicable, enter on registers maintained by it under Article 30 of The Water (Northern Ireland) Order 1999 full particulars of—
  - (a) any authorisation granted under regulation 19;
  - (b) any application for such an authorisation;
  - (c) any variation or revocation of such an authorisation;
  - (d) any notice under regulation 25;
  - (e) any variation or revocation of any such notice;
  - (f) any information furnished to the Department for the purposes of regulation 19 or 24;

- (g) any monitoring information provided in connection with any authorisation under regulation 19;
- (h) any conviction for an offence under these Regulations;
- (i) any code of practice approved under these Regulations.
- (2) Article 31 of the Water (Northern Ireland) Order 1999 (exclusion from registers of information affecting national security) and Article 32 of that Order (exclusion from registers of certain confidential information) apply in relation to particulars entered by the Department under (1) as they apply in relation to that Order.

#### **Penalties**

- 29. A person guilty of an offence under regulation 19, 24 or 25 is liable—
  - (a) on summary conviction, to a fine not exceeding level 5 on the standard scale or to imprisonment for a term not exceeding 3 months; or
  - (b) on conviction on indictment, to a fine or to imprisonment for a term not exceeding 2 years.

#### **Corporate offences**

- **30.**—(1) For the purposes of these Regulations, section 20(2) of the Interpretation Act (Northern Ireland) 1954 applies with the omission of the words "the liability of whose members is limited to" and where affairs of a body corporate are managed by its members, applies in relation to acts or defaults of a member in connection with the functions of management as if that person were a Director of the body corporate.
  - (2) If an offence committed by a partnership is shown—
    - (a) to have been committed with the consent or connivance of a partner; or
    - (b) to be attributable to any neglect on the part of the partner,

the partner as well as the partnership is guilty of the offence and liable to be proceeded against and punished accordingly.

- (3) Proceedings for an offence alleged to have been committed by an unincorporated association must be brought in the name of the association and not in the name of any of its members.
- (4) A fine imposed on an unincorporated association on its conviction for an offence must be paid out of the funds of the association.
  - (5) If an offence committed by an unincorporated association, other than a partnership is shown—
    - (a) to have been committed with the consent or connivance of an officer of the association or a member of its governing body; or
    - (b) to be attributable to any neglect on the part of such an officer or member,

that officer or member as well as the association is guilty of the offence and liable to be proceeded against and punished accordingly.

#### Revocation

31. The Groundwater Regulations (Northern Ireland) 1998(16) are revoked.

Sealed with the Official Seal of the Department of the Environment on 2 July 2009



Wesley Shannon
A senior officer of the Department of the
Environment