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STATUTORY RULES OF NORTHERN IRELAND

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**1998 No. 401**

**ENVIRONMENTAL PROTECTION**

**The Groundwater Regulations (Northern Ireland) 1998**

*Made - - - - 18th November 1998*

*Coming into operation—*

*regulations 1, 2 and 22 1st January 1999*

*all other provisions 1st April 1999*

The Department of the Environment, being a department designated<sup>(1)</sup> for the purposes of section 2(2) of the European Communities Act 1972<sup>(2)</sup> in relation to measures relating to the prevention, reduction and elimination of pollution of water, in exercise of the powers conferred on it by that section and of every other power enabling it in that behalf, hereby makes the following Regulations:

**Citation and commencement**

1. These Regulations may be cited as the Groundwater Regulations (Northern Ireland) 1998 and shall come into operation—

- (a) in the case of this regulation and regulations 2 and 22, on 1st January 1999;
- (b) in the case of all other provisions, on 1st April 1999.

**Interpretation**

2.—(1) In these Regulations—

“the Act” means the Water Act (Northern Ireland) 1972<sup>(3)</sup>;

“the Appeals Commission” means the Water Appeals Commission for Northern Ireland;

“authorisation” means—

- (a) an authorisation under regulation 17 or 18;
- (b) a consent under section 8 of the Act; and

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(1) S.I.1989/2393  
(2) 1972 c. 68  
(3) 1972 c. 5 (N.I.)

- (c) an authorisation under Article 6 of the Industrial Pollution Control (Northern Ireland) Order 1997<sup>(4)</sup> in relation to a process designated for integrated central control under Article 3 of that Order;

“the Department” means the Department of the Environment;

“direct discharge” means the introduction into groundwater of any substance in list I or II without percolation through the ground or subsoil;

“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;

“the Groundwater Directive” means Council Directive 80/68/EEC<sup>(5)</sup>;

“indirect discharge” means the introduction into groundwater of any substance in list I or II after percolation through the ground or subsoil;

“pollution” means the discharge by man, directly or indirectly, of substances or energy into groundwater, the results of which are such to endanger human health or water supplies, harm living resources and the aquatic ecosystem or interfere with other legitimate uses of water;

“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<sup>(6)</sup>;

“substance in list I” and “substance in list II” shall have the meanings given by paragraphs 1 and 2 of the Schedule and paragraph 3 of the Schedule shall have effect.

(2) For the purposes of these Regulations any reference to water contained in underground strata in the Act includes groundwater.

(3) Expressions used in these Regulations which are also used in the Groundwater Directive have the same meaning as in the Directive.

(4) The Interpretation Act (Northern Ireland) 1954<sup>(7)</sup> shall apply to these Regulations as it applies to a Measure of the Northern Ireland Assembly.

### **Exclusions from these Regulations**

3. Nothing in these Regulations shall apply in relation to—

- (a) any discharge of matter containing radioactive substances;
- (b) any discharge of domestic effluent from an isolated dwelling which is not connected to a sewerage system and which is situated outside any area protected for the abstraction of water for human consumption;
- (c) any discharge found by the Department to contain substances in list I or II in a quantity and concentration to be so small as to obviate any present or future danger of deterioration in the quality of the receiving groundwater.

### **Discharge of functions**

4. The Department shall for the purposes of implementing the Groundwater Directive discharge its functions under these Regulations, the Act, and the Industrial Pollution Control (Northern Ireland) Order 1997 in accordance with the following provisions of these Regulations.

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(4) S.I. 1997/2777 (N.I. 18)

(5) O.J. No. L20, 26.1.80, p. 43

(6) S.I. 1993/3160 (N.I. 15)

(7) 1954 c. 33 (N.I.)

### **Measures to prevent the introduction into groundwater of list I substances**

5.—(1) An authorisation shall not be granted if it would permit the direct discharge of any substance in list I.

(2) An authorisation shall not be granted in relation to—

- (a) the disposal, or tipping for the purpose of disposal, of any substance in list I which might lead to an indirect discharge of that substance; or
- (b) any other activity on or in the ground which might lead to an indirect discharge of any substance in list I;

unless that activity has been subjected to prior investigation.

(3) In the light of any such investigation—

- (a) an authorisation shall not be granted if it would permit the indirect discharge of any substance in list I; and
- (b) any authorisation granted must include conditions which require that all necessary technical precautions are observed to prevent an indirect discharge of any substance in list I.

(4) The Department shall not grant its consent under Article 46(4) of the Roads (Northern Ireland) Order 1993 for the discharge of any substance in list I into a road drain if the discharge results in that substance entering into groundwater.

(5) The powers conferred by regulation 18 shall be exercised if it is necessary to do so in order to prevent an indirect discharge of any substance in list I due to activities mentioned in paragraph (2)(b).

(6) However, a discharge of any substance in list I into groundwater may be authorised after prior investigation if—

- (a) the investigation reveals that the groundwater is permanently unsuitable for other uses (especially domestic or agricultural uses), presence of that substance does not impede exploitation of ground resources and conditions are imposed which require that all technical precautions are observed to prevent that substance from reaching other aquatic systems or harming other ecosystems; or
- (b) the discharge is due to the re-injection into the same aquifer of water use for geothermal purposes, water pumped out of mines and quarries or water pumped out for civil engineering works.

### **Measures to limit the introduction into groundwater of list II substances to avoid pollution**

6.—(1) An authorisation shall not be granted in relation to—

- (a) any direct discharge of any substance in list II;
- (b) any disposal or tipping for the purpose of disposal of any substance in list II which might lead to an indirect discharge of that substance;
- (c) any other activity on or in the ground which might lead to an indirect discharge of any substance in list II,

unless that activity has been subjected to prior investigation.

(2) An authorisation may only be granted if, in the light of any such investigation, it includes conditions which require that all necessary technical precautions are observed to prevent groundwater pollution by any substance in list II.

(3) The Department shall not grant its consent under Article 46(4) of the Roads (Northern Ireland) Order 1993 for the discharge of any substance in list II into a road drain if the discharge results in that substance polluting groundwater.

(4) The powers conferred by regulation 18 shall be exercised if it is necessary to do so for the purposes of avoiding pollution of groundwater by substances in list II due to activities mentioned in paragraph (1)(c).

#### **Artificial recharges for the purposes of groundwater management**

7. Artificial recharges may be authorised on a case by case basis for the purposes of groundwater management notwithstanding regulations 5 and 6 but such authorisation shall only be granted if there is no risk of polluting groundwater.

#### **Examination required in prior investigation**

8. Any prior investigation required by regulation 5 or 6 shall include 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 shall establish whether the discharge of substances into groundwater is a satisfactory solution from the point of view of the environment.

#### **Surveillance of groundwater**

9. An authorisation which is subject to any of the provisions of regulations 5, 6 or 7 may only be granted if the Department has checked that the groundwater (and, in particular, its quality) will undergo the requisite surveillance.

#### **Terms of authorisation of discharge of substances in list I or II**

- 10.—(1) This regulation applies where—
- (a) a direct discharge of any substance in list I or II is authorised in accordance with regulation 5(6) or 6; or
  - (b) waste water disposal which inevitably causes an indirect discharge of any substance in list II is authorised in accordance with regulation 6.
- (2) In a case where this regulation applies the authorisation shall specify in particular—
- (a) the place where the discharge may be made;
  - (b) the method of discharge which may be used;
  - (c) the essential precautions which must be taken, paying particular attention to the nature and concentration of any substance in list I or II present in the effluent, the characteristics of the receiving environment and the proximity of water catchment areas, in particular those for drinking, thermal and mineral water;
  - (d) the maximum quantity of any such substance permissible in the effluent during one or more specified periods of time and the appropriate requirements as to the concentration of any such substance;
  - (e) the arrangements for monitoring effluents discharged into groundwater;
  - (f) if necessary, measures for monitoring groundwater, and in particular its quality.

#### **Terms of authorisation for disposal or tipping for the purpose of disposal**

- 11.—(1) This regulation applies where—

- (a) any disposal, or tipping for the purpose of disposal, of any matter which might lead to an indirect discharge of any substance in list I or II is authorised in accordance with regulation 5 or 6; and
  - (b) in the case of a disposal, it is not a disposal of waste water to which regulation 10(1)(b) applies.
- (2) In a case where this regulation applies the authorisation shall specify in particular—
- (a) the place where the disposal or tipping may be done;
  - (b) the methods of disposal or tipping which may be used;
  - (c) the essential precautions which must be taken, paying particular attention to the nature and concentration of any such substance present in the matter to be disposed of or tipped, the characteristics of the receiving environment and the proximity of water catchment areas, in particular those for drinking, thermal and mineral water;
  - (d) the maximum quantity permissible, during one or more specified periods of time, of the matter containing any such substance and, where possible, of any such substance, to be tipped or disposed of and the appropriate requirements as to the concentration of any such substance;
  - (e) the technical precautions to be implemented to prevent any discharge into groundwater of any substance in list I and any pollution of such water by any substance in list II;
  - (f) if necessary, the measures for monitoring the groundwater, and in particular its quality.

### **Period and conditions of authorisation**

12.—(1) An authorisation of—

- (a) a direct discharge of any substance in list I or II; or
- (b) any disposal, or tipping for the purpose of disposal, of any matter which might lead to an indirect discharge of any substance in list I or II,

may be granted for limited period only, and must be reviewed at least once in every 4 years when it may be renewed, amended or revoked.

(2) If the applicant for any such authorisation states, or it is otherwise evident, that he will be unable to comply with the conditions of the proposed authorisation, the authorisation shall not be granted.

(3) The Department shall monitor compliance with the conditions of any such authorisation and the effects of discharges on groundwater.

(4) If the conditions of any such authorisation are not complied with, the appropriate steps shall be taken to ensure compliance and, if necessary, the revocation of the authorisation.

### **Inventory of authorisations**

13. The Department shall keep an inventory of authorisations of—

- (a) direct or indirect discharges of any substance in list I;
- (b) direct discharges of any substance in list II; and
- (c) artificial recharges for the purposes of groundwater management.

### **Application of measures not to lead to pollution of groundwater**

14. The application of the measures taken pursuant to these Regulations may on no account lead, either directly or indirectly, to pollution of groundwater.

### **Application of provisions of water pollution legislation**

15.—(1) A person shall be treated as contravening section 8 of the Act (discharge of effluent into an underground stratum) if—

- (a) whether knowingly or otherwise—
  - (i) he disposes of, or tips for the purposes of disposal, any substance in list I or II in circumstances which might lead to an indirect discharge of that substance into groundwater unless it is carried on under and in accordance with an authorisation granted under regulation 17; or
  - (ii) he carries on any activity in contravention of a prohibition imposed under regulation 18 or any authorisation granted under that regulation; or
- (b) he contravenes the conditions of any authorisation under regulation 17 or 18.

(2) Section 11 of the Act (protection for persons complying with conditions) shall have effect as if the reference to a consent under section 8 included a reference to an authorisation granted under regulation 17 or 18.

### **Obtaining of information**

16.—(1) For the purpose of the discharge of its functions under these Regulations the Department may, by notice in writing served on him, require any person to furnish such information specified in the notice as the Department reasonably considers it needs, in such form and within such period following service of the notice, or at such time, as is so specified.

(2) A person who fails, without reasonable excuse, to comply with a requirement to provide information imposed under paragraph (1) shall be guilty of an offence and shall be liable—

- (a) on summary conviction, to a fine not exceeding the statutory maximum;
- (b) on conviction on indictment, to a fine or to imprisonment for a term not exceeding 2 years, or to both.

### **Authorisation of disposal or tipping of substances in list I or II**

17.—(1) An application for an authorisation for the purposes of regulation 15(1)(a)(i) shall be made in writing to the Department.

(2) If in any case the Department considers that there are special reasons why the application should be advertised, it may by notice in writing served on the applicant require him to advertise the application in such manner as may be specified in the notice.

- (3) The Department may either—
  - (a) grant an authorisation in writing subject to such conditions as it sees fit; or
  - (b) by notice in writing refuse the application and the notice shall state the Department's reasons for refusal.

(4) The Department may at any time, by notice in writing served on the person holding an authorisation under this regulation, vary or revoke the authorisation and a notice of variation or revocation shall state the Department's reasons.

### **Notice to prevent or control indirect discharges of substances in list I or II**

18.—(1) Subject to paragraph (2), 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 an indirect discharge of any substance in list I or pollution of groundwater as a result of an indirect discharge of any substance in list II,

the Department may serve a notice in writing on that person prohibiting him from carrying on that activity or authorising him to carry on that activity subject to such conditions as are specified in the notice and which are necessary to prevent an indirect discharge of any substance in list I or pollution of groundwater as a result of an indirect discharge of any substance in list II.

(2) This regulation shall not apply to the disposal, or tipping for the purpose of disposal, of any substance in list I or II except in a case falling within regulation 22(3) during the period whilst the application in question is pending.

(3) The Department may at any time, by notice in writing served on the person on whom a notice under paragraph (1) was served, vary or revoke that notice and a notice of variation or revocation shall state the Department's reasons.

### **Appeals**

**19.**—(1) A person may appeal by notice in writing to the Appeals Commission against any decision of the Department under regulation 17 or 18 within 28 days from the date on which notice of the decision of the Department is given to him or within such longer period as the Appeals Commission may allow.

(2) Where—

- (a) an application has been made to the Department in accordance with regulation 17; and
- (b) the Department has not notified the applicant of its decision in relation to that application within—
  - (i) a period of 4 months beginning with the date on which it received the application (or, if the application must be advertised, the date on which advertising is completed); or
  - (ii) if the Department and the applicant agree in writing to a longer period, that period,the applicant may for the purposes of this regulation treat this as a refusal by the Department of the application and appeal to the Appeals Commission.

### **Codes of practice**

**20.**—(1) The Department may from time to time approve for the purposes of these Regulations (or withdraw its approval of) codes of practice issued for the purpose of giving practical guidance to persons engaged in any activity falling within regulation 5(2)(b) or 6(1)(c) about the steps they should take to prevent substances in list I from entering groundwater or to avoid pollution of such water by substances in list II.

(2) When the Department exercises its powers under paragraph (1) it shall make such arrangements as it considers appropriate for publicising its approval, or, as the case may be, its withdrawal.

(3) The Department shall make appropriate arrangements for bringing each code of practice for the time being approved under paragraph (1) to the attention of persons engaged in the relevant activity.

### **Particulars to be included in registers**

**21.**—(1) Subject to paragraph (2), the Department shall, as soon as reasonably practicable, enter on the register maintained by it under section 9(9) of the Act full particulars of—

- (a) any authorisation under regulation 17;
- (b) any application for such an authorisation;
- (c) any variation or revocation of such an authorisation;
- (d) any notice under regulation 18;

- (e) any variation or revocation of any such notice;
  - (f) any information furnished to the Department for the purposes of regulation 17 or 18;
  - (g) any monitoring information provided in connection with any authorisation under regulation 17 or 18;
  - (h) any conviction for an offence under section 8 of the Act;
  - (i) any finding of the Department under regulation 3(c), any determination of the Department under paragraph 1(2) or 2(2) of the Schedule;
  - (j) any code of practice for the time being approved under regulation 20.
- (2) Nothing in paragraph (1) shall require the Department to keep on a register—
- (a) monitoring information more than 4 years after that information was entered on the register;
  - (b) other information which has been superseded by later information more than 4 years after that later information was entered on the register; or
  - (c) information relating to an application for an authorisation under regulation 17 after the application has been withdrawn

### **Transitional provisions**

**22.**—(1) This regulation applies where any application is made before 1st April 1999 to the Department for an authorisation for the purposes of regulation 15(1)(a)(i).

(2) The application shall be dealt with in the same manner as an application made on or after 1st April 1999 but—

- (a) an appeal by virtue of regulation 19(2) shall not be made in relation to the application before 1st August 1999; and
- (b) an authorisation issued before 1st April 1999 in relation to the application shall have effect on or after that date as an authorisation under regulation 17.

(3) Where—

- (a) the application has not been finally disposed of before 1st April 1999; and
- (b) the application relates to an activity which is substantially the same as an activity carried on by the applicant or his predecessor before that date at the place to which the application relates;

the Department shall be deemed to have given the authorisation applied for and the deemed authorisation shall continue in force until the application is finally disposed of or, if before that date a notice under regulation 18 is served on the applicant in relation to the activity in question, until the date of service of that notice.

- (4) An application shall be treated as finally disposed of for the purposes of paragraph (1) on—
- (a) the date on which the application is withdrawn;
  - (b) if the Department gives or refuses its authorisation, the expiration (without an appeal being made) of the time limit for appealing against that decision; or
  - (c) if an appeal is duly made against the Department's decision, the date on which that appeal is determined or withdrawn.



### **Transfrontier consultation**

**23.**—(1) Where the Department intends to grant an authorisation for a discharge into transfrontier groundwater it shall inform the competent authorities in the Republic of Ireland before an authorisation is issued.

(2) At the request of either the Department or the competent authorities in the Republic of Ireland and before an authorisation is granted under regulation 17 or 18, consultations shall be held in which the Commission may participate.

### **Revocation**

**24.** The Pollution of Groundwater by Dangerous Substances Regulations (Northern Ireland) 1994(8) are hereby revoked.

Sealed with the Official Seal of the Department of the Environment on

L.S.

18th November 1998.

*C. D. Smith*  
Assistant Secretary

**Status:** This is the original version (as it was originally made). This item of legislation is currently only available in its original format.

SCHEDULE

Regulation 2

**List I**

1.—(1) Subject to sub-paragraph (2), a substance is in list I if it belongs to one of the following families or groups of substances—

- (a) organohalogen compounds and substances which may form such compounds in the aquatic environment;
- (b) organophosphorus compounds;
- (c) organotin compounds;
- (d) substances which possess carcinogenic, mutagenic or teratogenic properties in or via the aquatic environment<sup>(9)</sup>;
- (e) mercury and its compounds;
- (f) cadmium and its compounds;
- (g) mineral oils and hydrocarbons;
- (h) cyanides.

(2) A substance is not in list I if it has been determined by the Department to be inappropriate to list I on the basis of a low risk of toxicity, persistence and bioaccumulation.

**List II**

2.—(1) A substance is in list II if it could have a harmful effect on groundwater and it belongs to one of the following families or groups of substances—

- (a) the following metalloids and metals and their compounds:

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Zinc	Tin
Copper	Barium
Nickel	Beryllium
Chrome	Boron
Lead	Uranium
Selenium	Vanadium
Arsenic	Cobalt
Antimony	Thallium
Molybdenum	Tellurium
Titanium	Silver

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- (b) biocides and their derivatives not appearing in list I;

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(9) Where, any substance which would otherwise be in list II is carcinogenic, mutagenic or teratogenic, it is included in this category in list I

(c) substances which have a deleterious effect on the taste or odour of groundwater, and compounds liable to cause the formation of such substances in such water and to render it unfit for human consumption;

(d) toxic or persistent organic compounds of silicon, and substances which may cause the formation of such compounds in water, excluding those which are biologically harmless or are rapidly converted in water into harmless substances;

(e) inorganic compounds of phosphorus and elemental phosphorus;

(f) fluorides;

(g) ammonia and nitrites.

(2) A substance is also in list II if–

(a) it belongs to the families and groups of substances set out in paragraph 1(1);

(b) it has been determined by the Department to be inappropriate to list I under paragraph 1(2); and

(c) it has been determined by the Department to be appropriate to be classed in list II having regard to toxicity, persistence and bioaccumulation.

3. The Department shall from time to time publish a summary of the effect of its determinations under this Schedule in such manner as it considers appropriate and shall make copies of any such summary available to the public free of charge.

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## EXPLANATORY NOTE

*(This note is not part of the Regulations.)*

These Regulations implement the Groundwater Directive (Council Directive [80/68/EEC](#)) for Northern Ireland. They supplement existing water pollution legislation.

The Regulations require the Department of the Environment to use its new powers under the Regulations and its existing powers under the Water Act (Northern Ireland) 1972 to prevent the direct or indirect discharge of list I substances to groundwater and to control pollution resulting from the direct or indirect discharge of list II substances (regulations 4 to 14).

The new powers are conferred by regulations 13 and 16 to 20 which introduce–

(a) a new requirement for an authorisation for the disposal, or tipping for the purposes of disposal, of list I or II substances:

(b) a new procedure for prohibiting or regulating by notice other activities in or on land which pose an indirect threat to groundwater from list I or II substances.

There are exclusions from the Regulations in relation to radioactive substances, domestic effluent from isolated dwellings and discharges containing small quantities and concentrations of list I or II substances (regulation 3). There are also exceptions from the main controls (subject to certain safeguards) in relation to–

(a) discharges to groundwater unsuitable for other uses,

(b) water used for geothermal purposes or pumped out of mines, quarries or civil engineering works, and

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(c) artificial recharges of groundwater for management purposes (regulations 4(6) and 12).

The Regulations apply certain modifications to section 8 of the Water Act (Northern Ireland) 1972 in connection with the new controls (regulations 15 and 16).

Regulation 21 deals with information to be included on registers maintained under section 9(9) of the Water Act (Northern Ireland) 1972. Regulation 22 makes transitional provisions in relation to the new authorisation procedure. Regulation 23 makes provision for consultation with the competent authorities in the Republic of Ireland if the Department intends to grant an authorisation which might affect transfrontier groundwater. Regulation 24 revokes the Pollution of Groundwater by Dangerous Substances Regulations (Northern Ireland) 1994.

Copies of the Groundwater Directive may be obtained from the Stationery Office Ltd, 16 Arthur Street, Belfast BT1 4GD.