

**2007 No. 187**

**WATER AND SEWERAGE SERVICES**

**The Urban Waste Water Treatment Regulations (Northern  
Ireland) 2007**

*Made* - - - - - *20th March 2007*

*Coming into operation* - - - - - *1st April 2007*

The Department for Regional Development and the Department of the Environment are designated(a) for the purposes of section 2(2) of the European Communities Act 1972(b) in relation to measures relating to the collection, treatment and discharge of urban waste water and the treatment and discharge of waste water from certain industrial sectors.

The Department for Regional Development and the Department of the Environment, acting jointly, in exercise of the powers conferred on each Department by that section make the following Regulations:

**Citation and commencement**

1. These Regulations may be cited as the Urban Waste Water Treatment Regulations (Northern Ireland) 2007 and shall come into operation on 1st April 2007.

**Interpretation**

2.—(1) In these Regulations—

“the 1999 Order” means the Water (Northern Ireland) Order 1999 (c);

“the 2006 Order” means the Water and Sewerage Services (Northern Ireland) Order 2006(d);

“the Authority” means the Northern Ireland Authority for Utility Regulation;

“agglomeration” means an area where the population and/or economic activities are sufficiently concentrated for urban waste water to be collected and conducted to an urban waste water treatment plant or to a final discharge point;

“coastal waters” means the waters outside the low-water line or the outer limit of an estuary;

“collecting system” means a system of conduits which collects and conducts urban waste water;

“the Department” means the Department of the Environment;

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(a) S.I. 1992/1711

(b) 1972 c. 68

(c) S.I. 1999 No. 662 (N.I. 6) as amended by S.I. 2006/3336 (N.I. 21)

(d) S.I. 2006/3336 (N.I. 21)

“the Directive” means Council Directive 91/271/EEC as amended by Council Directive 98/15/EC concerning urban waste water treatment(a), and references to other Community Directives are references to Directives other than the Directive;

“domestic waste water” means waste water from residential settlements and services which originates predominantly from the human metabolism and from household activities;

“estuary” means the transitional area at the mouth of a river between fresh water and coastal waters, the outer (seaward) limits of which are shown on the maps kept in accordance with regulation 14;

“eutrophication” means the enrichment of water by nutrients, especially compounds of nitrogen and/or phosphorus, causing an accelerated growth of algae and higher forms of plant life to produce an undesirable disturbance to the balance of organisms present in the water and to the quality of the water concerned;

“high natural dispersion area” has the meaning given by regulation 3;

“industrial waste water” means any waste water which is discharged from premises used for carrying on any trade or industry, other than domestic waste water and run-off rain water;

“population equivalent” is a measurement of organic biodegradable load, and a population equivalent of 1 (1 p.e.) is the organic biodegradable load having a five-day biochemical oxygen demand (BOD<sub>5</sub>) of 60 g of oxygen per day (the load shall be calculated on the basis of the maximum average weekly load entering the treatment plant during the year, excluding unusual situations such as those due to heavy rain);

“relevant enforcement authority” means—

- (a) the Department for Regional Development, or
- (b) where the duty of a sewerage undertaker under article 149(1) of the 2006 Order is enforceable under Article 30 of that order by the Authority, the Authority;

“secondary treatment” means treatment of urban waste water by a process generally involving biological treatment with a secondary settlement or other process in which the requirements established in Table 1 in Schedule 3 are respected;

“sensitive area” has the meaning given by regulation 3;

“sludge” means residual sludge, whether treated or untreated, from urban waste water treatment plants; and

“urban waste water” means domestic waste water or the mixture of domestic waste water with industrial waste water and/or run-off rainwater.

(2) Other expressions used in these Regulations have the same meaning as in the Directive.

(3) The Interpretation Act (Northern Ireland) 1954(b) shall apply to these Regulations as it applies to a Measure of the Northern Ireland Assembly.

### **Sensitive areas and high natural dispersion areas**

3.—(1) In these Regulations—

- (a) “sensitive area” means an area of water which the Department has identified in accordance with the criteria set out in Part I of Schedule 1, and which is shown as such on maps held by the Department for the purposes of this regulation;
- (b) “high natural dispersion area” means an area of water which the Department has identified in accordance with the criteria set out in Part II of Schedule 1, and which is shown as such on maps kept by the Department for the purposes of this regulation.

(2) The Department shall review the identification of sensitive areas and high natural dispersion areas, in accordance with the relevant criteria in Schedule 1 no later than 31st December 2009 and thereafter at intervals of no more than 4 years.

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(a) O.J. No. L135, 30.5.91, p. 40  
(b) 1954 c. 33 (N.I.)

#### **Decisions taken on a review of sensitive areas or high natural dispersion areas**

- 4.—(1) Where the Department decides on a review under regulation 3(2)—
- (a) that any area of water identified as a sensitive area or as a high natural dispersion area should no longer be identified as such; or
  - (b) that any area of water not previously identified as a sensitive area or as a high natural dispersion area should be identified as such,

it shall act in accordance with the provisions set out in paragraph (2).

- (2) The Department shall before its decision takes effect—
- (a) publish a notice of its decision and the date on which it takes effect—
    - (i) in the Belfast Gazette; and
    - (ii) on its website;
  - (b) ensure that revised maps are deposited at its offices at 17 Antrim Road, Lisburn, Co. Antrim BT28 3AL—
    - (i) reflecting the Department's decision; and
    - (ii) indicating the date on which the decision takes effect; and
  - (c) take such other steps as it considers appropriate to publicise its decision.
- (3) A decision on a review under regulation 3(2) takes effect from the date stated in the Department's notice under paragraph (2)(a) and shall continue in force until a subsequent decision changing it following such a review takes effect.

#### **Duty to maintain up to date information about sensitive areas and high natural dispersion areas**

- 5.—(1) The Department shall ensure that its website—
- (a) shows maps of all areas of water currently identified as a sensitive area or as a high natural dispersion area; and
  - (b) gives the date on which any area of water was identified as a sensitive area or high natural dispersion area, or ceased to be so identified.
- (2) The Department shall keep available at its offices at 17 Antrim Road, Lisburn, Co. Antrim BT28 3AL, at all reasonable times for inspection by the public, free of charge—
- (a) the maps showing sensitive areas and high natural dispersion areas deposited with it for the purposes of regulation (3) and,
  - (b) the information mentioned in paragraph (1)(b).

#### **Duty to provide and maintain collecting systems and treatment plants**

6.—(1) This regulation supplements the duty imposed on every sewerage undertaker by Article 149(1) of the 2006 Order to provide sewerage systems and any contravention of the requirements of this regulation shall be treated for the purposes of that Order as a breach of that duty.

(2) Subject to paragraph (3), the duty imposed by sub-paragraph (1)(a) of Article 149 of the 2006 Order shall include a duty to ensure that collecting systems which satisfy the requirements of Schedule 2 are provided for every agglomeration with a population equivalent which is greater than 2,000.

- (3) Paragraph (2) shall not apply where:
- (a) the Department is satisfied that the establishment of a collecting system is not justified because it would produce no environmental benefit, or
  - (b) the relevant enforcement authority is satisfied that the establishment of a collecting system is not justified because it would involve excessive cost,

and individual systems or other appropriate systems are provided that the Department has certified achieve the same level of environmental protection.

(4) The duty imposed by sub-paragraph (1)(b) of Article 149 of the 2006 Order shall include a duty to ensure that urban waste water entering collecting systems is, before discharge, subject to treatment provided in accordance with regulation 7, and to ensure that—

- (a) plants built in order to comply with that regulation are designed (account being taken of seasonal variations of the load), constructed, operated and maintained to ensure sufficient performance under all normal local climatic conditions;
- (b) treated waste water and sludge arising from waste water treatment are reused whenever appropriate; and
- (c) disposal routes for treated waste water and sludge minimise the adverse effects on the environment.

### **Requirements as to provision of treatment**

7.—(1) Subject to paragraph (5), treatment plants which provide secondary treatment or an equivalent treatment shall be provided—

- (a) in respect of all discharges from agglomerations with a population equivalent of more than 10,000; and
- (b) in respect of all discharges to fresh waters and estuaries from agglomerations with a population equivalent of between 2,000 and 10,000.

(2) Subject to paragraph (3), treatment plants which provide more stringent treatment than that described in paragraph (1) shall be provided in respect of all discharges from agglomerations with a population equivalent of more than 10,000 into sensitive areas, or into the relevant catchment areas of sensitive areas where the discharges contribute to the pollution of these areas.

(3) Paragraph (2) shall not apply in relation to a sensitive area where the Department is satisfied as a result of monitoring, that the minimum percentage of reduction of the overall load entering all urban waste water treatment plants in that area, and all urban waste water treatment plants in the catchment of that area the discharges from which contribute to the pollution of that area, is at least 75% for total phosphorus and at least 75% for total nitrogen.

(4) Where, following a review of the identification of waters as sensitive areas or high natural dispersion areas under regulation 3, an area ceases to be identified as a high natural dispersion area or becomes identified as a sensitive area, then, as respects that area, paragraph (1) or, as the case may be, paragraph (2) shall have effect from the seventh anniversary of the change of identification.

(5) Discharges of urban waste water from agglomerations with a population equivalent of between 10,000 and 150,000 (or, in an exceptional case and with the agreement of the Commission pursuant to Article 8(5) of the Directive, of more than 150,000), to coastal waters which are in high natural dispersion areas, and discharges from agglomerations with a population equivalent of between 2,000 and 10,000 into estuaries which are in high natural dispersion areas, may be subjected to less stringent treatment than that described in paragraph (1) so long as—

- (a) the discharges receive at least primary treatment in conformity with the control procedures set out in Part II of Schedule 3; and
- (b) the Department is satisfied that comprehensive studies have indicated that such discharges will not adversely affect the environment.

(6) Appropriate treatment of urban waste water entering collecting systems shall be provided in respect of—

- (a) discharges to fresh waters and estuaries from agglomerations with a population equivalent of less than 2,000; and
- (b) discharges to coastal waters from agglomerations with a population equivalent of less than 10,000.

(7) In this regulation—

- (a) “appropriate treatment” means treatment of urban waste water by any process and/or disposal system which after discharge allows the receiving waters to meet the relevant quality objectives and the relevant provisions of the Directive and other Community Directives; and
- (b) “primary treatment” means treatment of urban waste water by a physical and/or chemical process involving settlement of suspended solids, or other processes in which the BOD<sub>5</sub> of the incoming waste water is reduced by at least 20% before discharge and the total suspended solids of the incoming waste water are reduced by at least 50%.

#### **Discharges of treated urban waste water**

8.—(1) Discharges from urban waste water treatment plants described in paragraphs (1) or (2) of regulation 7 or from any such plant which provides treatment in accordance with paragraph (5) of that regulation, (including any such plants which are provided other than by a sewerage undertaker) shall satisfy the relevant requirements of Part I of Schedule 3.

(2) It shall be the duty of the Department, in exercise of its functions under Part II of the 1999 Order (prevention of pollution of water) to secure—

- (a) with respect to any such discharge as is described in paragraph (1), that the requirements of that paragraph are satisfied;
- (b) with respect to any discharge described in paragraph (5) or (6) of regulation 7, that the requirements of the said paragraph (5) or, as the case may be, the said paragraph (6) are satisfied;
- (c) with respect to any discharge from a collecting system described in regulation 6 or an urban waste water treatment plant described in regulation 7, the limitation of pollution of receiving waters due to storm water overflows; and
- (d) that no sludge is discharged to surface waters.

(3) The Department shall at regular intervals review and if necessary for the purposes of complying with this regulation, modify or revoke consents granted under Part II of the 1999 Order.

(4) Nothing in paragraph 6 of Schedule 1 to the 1999 Order shall restrict the power of the Department to modify or revoke a consent in pursuance of the duty imposed by this regulation.

#### **Discharges of industrial waste water to collecting systems or treatment plants**

9.—(1) It shall be the duty of every sewerage undertaker and the relevant enforcement authority in exercising their functions under Chapter III of Part VI of the 2006 Order (trade effluent) with respect to any discharge of industrial waste water, to secure that the requirements of Schedule 4 are met in respect of that discharge.

(2) Nothing in Article 179 (conditions of consent) of the 2006 Order shall be construed as restricting the power of a sewerage undertaker to impose in any consent under that Part such conditions as are necessary to comply with paragraph (1).

(3) Nothing in any agreement entered into, or deemed to have been entered into, between a sewerage undertaker and the owner or occupier of premises used for carrying on any trade or industry shall be treated as a consent, direction or condition for the purposes of Chapter III of Part VI of the 2006 Order unless the terms of that agreement are such as will secure that the requirements of Schedule 4 are met in respect of any discharge to which the agreement relates.

(4) A sewerage undertaker shall review, and if necessary modify, the consents, directions or conditions granted or deemed to be granted under Chapter III of Part VI of the 2006 Order at regular intervals.

(5) For the purposes of complying with paragraph (1) a sewerage undertaker may vary any agreement, or deemed agreement, under Article 187 of the 2006 Order (Agreements with respect to the disposal etc. of trade effluent) which provides for the discharge of industrial waste water to

an urban waste water treatment plant without first entering a public sewer, and any such agreement shall not be enforceable if and to the extent that it permits any discharge of industrial waste water in respect of which the requirements of Schedule 4 are not met.

(6) Nothing in Chapter III of Part VI of the 2006 Order shall—

- (a) restrict the power of a sewerage undertaker to vary a consent, direction or condition in pursuance of the duty imposed by this regulation; or
- (b) render a sewerage undertaker or the Department for Regional Development liable to pay compensation as a consequence of any such variation made in pursuance of that duty.

### **Discharges of certain industrial waste water into receiving waters**

**10.**—(1) This regulation applies to discharges of biodegradable industrial waste water from plants representing 4,000 p.e. or more belonging to the industrial sectors listed in Schedule 5 which does not enter urban waste water treatment plants before discharge to receiving waters.

(2) It shall be the duty of the Department to impose, in every consent granted under Part II of the 1999 Order (prevention of pollution of water) with respect to any discharge to which this regulation applies (whether on the grant of consent or by notice under paragraph 5(2) of Schedule 1 to the 1999 Order), conditions which are appropriate to the nature of the industry concerned for the discharge of such waste water.

(3) Nothing in paragraph 6 of Schedule 1 to the 1999 Order shall restrict the power of the Department to modify or revoke a consent in pursuance of the duty imposed by this regulation.

### **Dumping of sludge from ships**

**11.** It shall be the duty of the Department being the licensing authority (within the meaning of sections 24 and 25(3) of the Food and Environment Protection Act 1985), in the exercise of its functions under Part II of that Act (deposits in the sea), to secure that no sludge is dumped from ships to surface waters.

### **Samples and records**

**12.**—(1) In this regulation—

- (a) a “relevant condition” means a condition imposed for the purposes of regulation 8(2) in a consent under Part II of the 1999 Order; and
- (b) “the operator” means, in relation to a relevant condition, the person who operates the urban waste water treatment plant, discharges from which are authorised by the consent in which that condition is imposed.

(2) Where the operator is required by a relevant condition to provide any apparatus for the purpose of measuring or recording the volume, rate of flow, nature, composition or temperature of any waste water, or for the purpose of collecting samples of waste water, any such apparatus so provided shall be presumed to register accurately unless the contrary is shown.

(3) Any record—

- (a) produced by any such apparatus as is mentioned in paragraph (2); or
- (b) made by or on behalf of the operator in order to comply with a relevant condition,

shall be evidence of the matters appearing from the record and shall in any proceedings under Part II of the 1999 Order be admissible in evidence against the operator.

(4) Where—

- (a) an entry is required by a relevant condition to be made in any record as to the observance of that or any other relevant condition; and
- (b) the entry has not been made,

that fact shall be admissible as evidence that that condition, or as the case may be, that other condition has not been observed.

(5) Where, in compliance with a relevant condition, a sample of waste water is collected by apparatus installed for the purpose of collecting such samples automatically, the sample shall be treated, for the purpose of Part II of the 1999 Order as being taken only at the time when it is removed from that apparatus.

(6) For the purposes of Part II of the 1999 Order a sample of waste water which is taken and analysed by the operator in compliance with a relevant condition shall not be treated as being taken on behalf of the Department.

### **Monitoring**

**13.** It shall be the duty of the Department—

- (a) to monitor or procure the monitoring by a competent authority or appropriate body of discharges from urban waste water treatment plants to verify compliance with the relevant requirements of Part I of Schedule 3 in accordance with the control procedures set out in Part II of that Schedule;
- (b) to monitor or procure the monitoring by a competent authority or appropriate body of waters subject to discharges from urban waste water treatment plants provided in accordance with regulation 7 in cases where it can be expected that the receiving environment will be significantly affected;
- (c) to carry out or procure the carrying out by a competent authority or appropriate body of monitoring and any other relevant studies to verify that discharges to which regulation 7(5) applies do not adversely affect the environment.

### **Deposit of maps**

**14.** The Department shall keep available at its offices at 17 Antrim Road, Lisburn, Co. Antrim BT28 3AL, at all reasonable times, for inspection by the public free of charge the maps referred to in the definition of “estuary” in regulation 2(1).

### **Information regarding the implementation of the Directive**

**15.** It shall be the duty of the Department and the Department for Regional Development, acting jointly, to—

- (a) publish every 2 years a situation report on the disposal of urban waste water and sludge, and transmit this report to the Commission as soon as it is published; and
- (b) establish, update and provide the Commission with information on a programme for the implementation of the Directive.

### **Revocation of Regulations**

**16.** On 1st April 2007 the Urban Waste Water Treatment Regulations (Northern Ireland) 1995 and the Urban Waste Water Treatment (Amendment) Regulations (Northern Ireland) 2003 shall be revoked.

Sealed with the Official Seal of the Department for Regional Development on 20th March 2007



*John Mills*  
A senior officer of the  
Department for Regional Development



*Wesley Shannon*  
A senior officer of the  
Department of the Environment

## SCHEDULE 1

Regulation 3

### PART I

#### CRITERIA FOR IDENTIFICATION OF SENSITIVE AREAS

A water body must be identified as a sensitive area if it falls into one of the following groups—

- (a) natural freshwater lakes, other freshwater bodies, estuaries and coastal waters which are found to be eutrophic or which in the near future may become eutrophic if protective action is not taken. The following elements might be taken into account when considering which nutrient should be reduced by further treatment—
  - (i) lakes and streams reaching lakes/reservoirs/closed bays which are found to have a poor water exchange, whereby accumulation may take place. In these areas, the removal of phosphorus should be included unless it can be demonstrated that the removal will have no effect on the level of eutrophication. Where discharges from large agglomerations are made, the removal of nitrogen may also be considered;
  - (ii) estuaries, bays and other coastal waters which are found to have a poor water exchange, or which receive large quantities of nutrients. Discharges from small agglomerations are usually of minor importance in those areas, but for large agglomerations, the removal of phosphorus and/or nitrogen should be included unless it can be demonstrated that the removal will have no effect on the level of eutrophication;
- (b) surface fresh waters intended for the abstraction of drinking water which could contain more than the concentration of nitrate laid down under the relevant provisions of Council Directive 75/440/EEC of 16th June 1975 concerning the quality required of surface water intended for the abstraction of drinking water in the Member States if action is not taken;
- (c) areas where further treatment than secondary or equivalent treatment is necessary to fulfil Council Directives.

### PART II

#### CRITERIA FOR IDENTIFICATION OF HIGH NATURAL DISPERSION AREAS

A marine water body or area can be identified as a high natural dispersion area if the discharge of waste water does not adversely affect the environment as a result of morphology, hydrology or specific hydraulic conditions which exist in that area.

When identifying high natural dispersion areas, the Department shall take into account the risk that the discharged load may be transferred to adjacent areas where it can cause detrimental environmental effects. The Department shall recognise the presence of sensitive areas outside Northern Ireland (including areas outside the United Kingdom).



The following elements shall be taken into consideration when identifying high natural dispersion areas—

open bays, estuaries and other coastal waters with a good water exchange and not subject to eutrophication or oxygen depletion or which are considered unlikely to become eutrophic or to develop oxygen depletion due to the discharge of urban waste water.

## SCHEDULE 2

Regulation 6

### REQUIREMENTS FOR COLLECTING SYSTEMS

1. Collecting systems shall take into account waste water treatment requirements.
2. The design, construction and maintenance of collecting systems shall be undertaken in accordance with the best technical knowledge not entailing excessive costs, notably regarding—
  - (a) volume and characteristics of urban waste water;
  - (b) prevention of leaks; and
  - (c) limitation of pollution of receiving waters due to storm water overflows.

## SCHEDULE 3

Regulations 7, 8 and 13

### PART I

#### REQUIREMENTS FOR DISCHARGES FROM TREATMENT PLANTS

1. Treatment plants shall be designed or modified so that representative samples of the incoming waste water and of treated effluent can be obtained before discharge to receiving waters.
2. Discharges from urban waste water treatment plants subject to treatment in accordance with regulation 7(1) and (2) shall, subject to paragraphs 4 and 5 of Part II, meet the requirements shown in Table 1.
3. Discharges from urban waste water treatment plants to those sensitive areas which are subject to eutrophication as identified in sub-paragraph (a) of Part I of Schedule 1 shall, subject to paragraphs 4 and 5 of Part II, also meet the requirements in Table 2.
4. More stringent requirements than those shown in Table 1 and/or Table 2 shall be applied where required to ensure that the receiving waters satisfy any other relevant Community Directives.
5. The points of discharge of urban waste water shall be chosen, as far as possible, so as to minimize the effects on receiving waters.

**TABLE 1**

**REQUIREMENTS FOR DISCHARGES FROM URBAN WASTE WATER TREATMENT PLANTS SUBJECT TO REGULATION 7(1) AND (2)**

The values for concentration or for the percentage of reduction shall apply.

<i>Parameters</i>	<i>Concentration</i>	<i>Minimum percentage of reduction(001)</i>	<i>Reference method of measurement</i>
Biochemical oxygen demand (BOD <sub>5</sub> at 20°C) without nitrification(002)	25 mg/l O <sub>2</sub>	70-90	Homogenized, unfiltered, undecanted sample. Determination of dissolved oxygen

Chemical oxygen demand (COD)	125 mg/l O <sub>2</sub>	75	before and after five-day incubation at 20°C ± 1°C, incomplete darkness. Addition of a nitrification inhibitor. Homogenized, unfiltered, undecanted sample Potassium dichromate
(001) Reduction in relation to the load of the influent. (002) The parameter can be replaced by another parameter: total organic carbon (TOC) or total oxygen demand (TOD) if a relationship can be established between BOD <sub>5</sub> , and the substitute parameter.			

Analyses concerning discharges from lagooning shall be carried out on filtered samples; however, the concentration of total suspended solids in unfiltered water samples shall not exceed 150 mg/l.

**TABLE 2**

**REQUIREMENTS FOR DISCHARGES FROM URBAN WASTE WATER TREATMENT PLANTS TO SENSITIVE AREAS WHICH ARE SUBJECT TO EUTROPHICATION AS IDENTIFIED IN SUB-PARAGRAPH (a) OF PART I OF SCHEDULE 1**

One or both parameters may be applied depending on the local situation. The values for concentration or for the percentage of reduction shall apply.

<i>Parameters</i>	<i>Concentration</i>	<i>Minimum percentage of reduction(003)</i>	<i>Reference method of measurement</i>
Total phosphorus	2 mg/l P (10,000-100,000 p.e.) 1 mg/l P (more than 100,000 p.e.)	80	Molecular absorption spectrophotometry
Total nitrogen(004)	15 mg/l N (10,000-100,000 p.e.)(005) 10 mg/l N (more than 100,000 p.e.)(005)	70-80	Molecular absorption spectrophotometry
(003) Reduction in relation to the load of the influent. (004) Total nitrogen means: the sum of total Kjeldahl-nitrogen (organic N + NH <sub>3</sub> ), nitrate (NO <sub>3</sub> )-nitrogen and nitrite (NO <sub>2</sub> )-nitrogen. (005) These values for concentration are			

annual means as referred to in Schedule 3, Part II, paragraph 4(c). However, the requirements for nitrogen may be checked using daily averages when it is proved, in accordance with Schedule 3, Part II, paragraph 1, that the same level of protection is obtained. In this case, the daily average must not exceed 20 mg/l of total nitrogen for all the samples when the temperature from the effluent in the biological reactor is superior or equal to 12 °C. The conditions concerning temperature could be replaced by a limitation on the time of operation to take account of regional climatic conditions.

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### PART III

#### REFERENCE METHODS FOR MONITORING AND EVALUATION OF RESULTS

1.
  - (a) The Department shall apply a monitoring method which corresponds at least with the level of requirements described below.
  - (b) Alternative methods to those mentioned in paragraphs 2, 3 and 4 may be used provided it can be demonstrated that equivalent results are obtained.
2.
  - (a) Flow-proportioned or time-based 24-hour samples shall be collected at the same well-defined point in the outlet and if necessary in the inlet of the treatment plant in order to monitor compliance with the requirements for discharged waste water laid down in these Regulations.
  - (b) Good international laboratory practices aiming at minimising the degradation of samples between collection and analysis shall be applied.
3. The minimum annual number of samples shall be determined according to the size of the treatment plant and be collected at regular intervals during the year:

—2,000 to 9,999 p.e.:	12 samples during the first year;  4 samples in subsequent years, if it can be shown that the water during the first year complies with the provisions of these Regulations; if 1 sample of the 4 fails, 12 samples must be taken in the year that follows;
—10,000 to 49,999 p.e.:	12 samples;
—50,000 p.e. or over:	24 samples.

4. The treated waste water shall be assumed to conform to the relevant parameters if, for each relevant parameter considered individually, samples of the water show that it complies with the relevant parametric value in the following way—

- (a) for the parameters specified in Table 1 and sub-paragraph (b) of regulation 7(7), a maximum number of samples which are allowed to fail the requirements, expressed in concentrations and/or percentage reductions in that Table and that sub-paragraph, is specified in Table 3;
- (b) for the parameters of Table 1 expressed in concentrations, the failing samples taken under normal operating conditions must not deviate from the parametric values by more than 100%;
- (c) for those parameters specified in Table 2 the annual mean of the samples for each parameter shall conform to the relevant parametric values.

5. Extreme values for the water quality in question shall not be taken into consideration when they are the result of unusual situations such as those due to heavy rain.

**TABLE 3**

<i>Series of samples taken in any year</i>	<i>Maximum number of samples which fail to conform</i>	<i>permitted</i>
4-7	1	
8-16	2	
17-28	3	
29-40	4	
41-53	5	
54-67	6	
68-81	7	
82-95	8	
96-110	9	
111-125	10	
126-140	11	
141-155	12	
156-171	13	
172-187	14	
188-203	15	
204-219	16	
220-235	17	
236-251	18	
252-268	19	
269-284	20	
285-300	21	
301-317	22	

318-334	23
335-350	24
351-365	25

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## SCHEDULE 4

Regulation 9

### INDUSTRIAL WASTE WATER

Industrial waste water entering collecting systems and urban waste water treatment plants shall be subject to such pre-treatment as is required in order to—

- protect the health of staff working in collecting systems and treatment plants;
- ensure that collecting systems, waste water treatment plants and associated equipment are not damaged;
- ensure that the operation of the waste water treatment plant and the treatment of sludge are not impeded;
- ensure that discharges from the treatment plants do not adversely affect the environment, or prevent receiving water from complying with other Community Directives; and
- ensure that sludge can be disposed of safely in an environmentally acceptable manner.

## SCHEDULE 5

Regulation 10

### INDUSTRIAL SECTORS REFERRED TO IN REGULATION 10

1. Milk processing.
2. Manufacture of fruit and vegetable products.
3. Manufacture and bottling of soft drinks.
4. Potato processing.
5. Meat industry.
6. Breweries.
7. Production of alcohol and alcoholic beverages.
8. Manufacturer of animal feed from plant products.
9. Manufacture of gelatine and of glue from hides, skin and bones.
10. Malt-houses.
11. Fish-processing industry.

## EXPLANATORY NOTE

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

These Regulations revoke and replace the Urban Waste Water Treatment Regulations (Northern Ireland) 1995 and the Urban Waste Water Treatment (Amendment) Regulations (Northern Ireland) 2003. The Regulations implement Council Directive 91/271/EEC as amended by Council Directive 98/15/EC concerning urban waste water treatment. They reflect the new arrangements for the delivery of sewerage services provided for in the Water and Sewerage Services (Northern Ireland) Order 2006.

Regulations 2 and 3 define certain terms used in these Regulations. Regulation 3 also places a duty on the Department of the Environment (“the Department”) to review the identification of sensitive areas and high natural dispersion areas by a specified date, and at least every 4 years thereafter.

Paragraphs (1) and (2) of regulation 4 place a duty on the Department to publish a notice of any decision on the review of sensitive areas or areas of high natural dispersion under regulation 3(2) in the Belfast Gazette and on its website, to deposit maps of the area affected by such a decision at its offices in Lisburn, and to take such other steps as it considers appropriate to publicise its decision. Paragraph (3) specifies that a decision takes effect on the date specified in the Department’s notice published in the Belfast Gazette and continues in force until any subsequent decision changing it takes effect.

Regulation 5 places a duty on the Department to maintain, on its website, maps of current sensitive areas and high natural dispersion areas, and the dates on which such areas were identified or ceased to be identified, and to ensure that maps and other information are available at its offices for public inspection.

Regulation 6 supplements the general duty imposed on a sewerage undertaker by Article 149 of the Water and Sewerage Services (Northern Ireland) Order 2006, by requiring it to secure that “collecting systems” (this and other expressions are defined in regulation 2(1)) are provided which secure that urban waste water entering collecting systems is subject to treatment provided in accordance with regulation 7.

Regulation 7 prescribes the standard of treatment required. The standard of treatment is determined according to the size of the “agglomeration” from which the waste water emanates and the nature of the waters into which the treated waste water is discharged. Generally, “secondary treatment” is required, but more stringent treatment is required for waters identified as “sensitive areas” and less stringent treatment is permissible for waters identified as “high natural dispersion areas”. Discharges from smaller agglomerations need to be subjected to “appropriate treatment”.

Regulation 8(1) requires that discharges from urban waste water treatment plants meet the requirements of Part I of Schedule 3. Paragraph (2) places a duty on the Department to ensure that those requirements are met.

Regulation 9 imposes requirements in respect of discharges of industrial waste water to collecting systems or treatment plants. A sewerage undertaker is empowered to modify trade effluent consents and agreements for this purpose.

Regulation 10 imposes a duty on the Department to secure that direct discharges of biodegradable industrial wastewater from the industrial sectors listed in Schedule 5 are subject to conditions appropriate to the nature of the industry concerned.

Regulation 11 prohibits the dumping of sludge from ships to surface waters.

Regulation 12 makes provision in connection with samples and records.

Regulation 13 imposes a duty on the Department to ensure that monitoring of discharges and waters to which the Regulations apply, and such other studies as are required by the Regulations,

are carried out. The requirements as to monitoring of discharges are set out in Part II of Schedule 3.

Regulation 14 requires the Department to keep maps showing estuaries available for inspection by the public.

Regulation 15 requires the Department and the Department for Regional Development, acting jointly, to publish a biennial report on the disposal of urban waste water and sludge and to send it to the Commission. It also requires the Department and the Department for Regional Development, acting jointly, to advise the Commission on the programme for implementing the Directive.

Regulation 16 revokes the Urban Waste Water Treatment Regulations (Northern Ireland) 1995 and the Urban Waste Water Treatment (Amendment) Regulations (Northern Ireland) 2003 on 1st April 2007.

Copies of the Directive may be obtained from Her Majesty's Stationery Office, 16 Arthur Street, Belfast BT1 4GD.