

## EUROPEAN COMMUNITIES

### WATER AND SEWERAGE

#### **The Urban Waste Water Treatment Regulations (Northern Ireland) 1995**

Made 16th January 1995

Coming into operation 1st March 1995

The Department of the Environment, being a department designated[1] for the purposes of section 2(2) of the European Communities Act 1972[2] 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, 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 Urban Waste Water Treatment Regulations (Northern Ireland) 1995 and shall come into operation on 1st March 1995.

#### **Interpretation**

2.—(1) In these Regulations—

"the 1972 Act" means the Water Act (Northern Ireland) 1972[3];

"the 1973 Order" means the Water and Sewerage Services (Northern Ireland) Order 1973[4];

"**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;

"**the Directive**" means Council Directive 91/271/EEC concerning urban waste water treatment[5], and references to other Community Directives are references to Directives other than Council Directive 91/271/EEC;

"**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 12;

"**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 (BOD5) 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);

"**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[6] 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 1 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 held

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 1997 and thereafter at intervals of no more than 4 years.

(3) Where, following a review under paragraph (2) an area of water becomes or ceases to be identified as a sensitive area or a high natural dispersion area the Department shall substitute such further maps as may be necessary to reflect the changes in identification.

### **Duty to provide and maintain sewers**

4.—(1) This regulation supplements the duty imposed on the Department[7] by Article 3(1)(b) and (c) of the 1973 Order to provide sewerage services.

(2) Subject to paragraph (3), the duty imposed by sub-paragraph (1)(b) of Article 3 of the 1973 Order shall include a duty to ensure that collecting systems which satisfy the requirements of Schedule 2 are provided—

(a) where the urban waste water discharges into receiving waters which are a sensitive area, by 31st December 1998 for every agglomeration with a population equivalent of more than 10,000; and

(b) without prejudice to sub-paragraph (a)—

(i) by 31st December 2000 for every agglomeration with a population equivalent of more than 15,000; and

(ii) by 31st December 2005 for every agglomeration with a population equivalent of between 2,000 and 15,000.

(3) Paragraph (2) shall not apply where the Department is satisfied that the establishment of a collecting system is not justified because—

(a) it would produce no environmental benefit, or

(b) it would involve excessive cost,

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

(4) The duty imposed by sub-paragraph (1)(c) of Article 3 of the 1973 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 5, 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**

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

(a) by 31st December 2000 or, in an exceptional case, such later date (not being later than 31st December 2005) as the Commission may agree pursuant to a request under Article 8(1) of the Directive, in respect of all discharges from agglomerations with a population equivalent of more than 15,000;

(b) by 31st December 2005 in respect of all discharges from agglomerations with a population equivalent of between 10,000 and 15,000; and

(c) by 31st December 2005 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 by 31st December 1998 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 as if the relevant date specified in that paragraph were the seventh

anniversary of the change of identification or, if later, the date so specified.

(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 by 31st December 2005 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 BOD5 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**

6.—(1) Discharges from urban waste water treatment plants described in paragraphs (1) or (2) of regulation 5 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 the Department) shall satisfy the relevant requirements of Part 1 of Schedule 3.

(2) In relation to urban waste water treatment plants which are provided other than by the Department it shall be the duty of the Department[8], in exercise of its functions under Part II of the 1972 Act (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 5, 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 4 or an urban waste water treatment plant described in regulation 5, the limitation of pollution of receiving waters due to storm water overflows; and

(d) with respect to the discharge of sludge—

(i) that the discharge of sludge to surface waters is phased out by 31st December 1998; and

(ii) that the total amount of toxic, persistent or bioaccumulable materials in the sludge which may be discharged to surface waters pursuant to consents under the said Part II is controlled by such consents and progressively reduced during the period ending on that date.

(3) In relation to urban waste water treatment plants provided by the Department it shall be the duty of the Department to secure that each of the requirements set out in paragraph (2) at sub-paragraphs (a) to (d) are satisfied or complied with.

(4) 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 1972 Act.

(5) Nothing in section 10(1) of the 1972 Act 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**

7.—(1) It shall be the duty of the Department in exercising its functions under Part V of the 1973 Order (trade effluents) 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 24(1) of the 1973 Order (conditions of consent) shall be construed as restricting the power of the Department 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 between the Department and the occupier of premises used for carrying on any trade or industry shall be treated as a consent, direction or condition for the

purposes of Part V of the 1973 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) The Department shall review, and if necessary modify, the consents, directions or conditions granted under Part V of the 1973 Order at regular intervals.

(5) For the purposes of complying with paragraph (1) the Department may vary any agreement under Article 32 of the 1973 Order (agreements as respects trade premises) 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 Part V of the 1973 Order shall—**

(a) restrict the power of the Department to vary a consent, direction or condition in pursuance of the duty imposed by this regulation; or

(b) render the Department 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**

8.—(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 1972 Act (prevention of pollution of water) with respect to any discharge on or after 31st December 2000 to which this regulation applies (whether on the grant of consent or a review of a consent, under section 10 of the 1972 Act), conditions which are appropriate to the nature of the industry concerned for the discharge of such waste water.

**Dumping of sludge from ships**

9.—(1) 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[9]), in the exercise of its functions under part II of that Act (deposits in the sea), to secure that—

(a) the dumping of sludge from ships to surface waters is phased out by 31st December 1998; and

(b) the total amount of toxic, persistent or bioaccumulable materials in sludge so disposed of is

licensed for disposal and progressively reduced in the period ending on that date.

(2) In relation to the dumping of sludge by the Department, it shall be the duty of the Department to secure that each of the requirements set out in paragraph (1) at sub-paragraphs (a) and (b) are satisfied or complied with.

### **Samples and records**

**10.—(1)** In this regulation—

(a) a "relevant condition" means a condition imposed for the purposes of regulation 6(2) in a consent under Part II of the 1972 Act; 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 1972 Act 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 maybe, 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 section 25(5) of the,1972 Act (right to take samples) as being taken only at

the time when it is removed from that apparatus.

(6) For the purposes of the said section 25(5), 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**

### **11. 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 1 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 amounts and composition of sludges disposed of to surface waters (other than by means of dumping from ships);

(c) 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 5 in cases where it can be expected that the receiving environment will be significantly affected;

(d) 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 5(5) applies and the disposal of sludge to surface waters (other than by means of dumping from ships) do not adversely affect the environment;

(e) to monitor or procure the monitoring by a competent authority or appropriate body of amounts and composition of sludges disposed of to surface waters by means of dumping from ships; and 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 the disposal of sludge to surface waters by means of dumping from ships does not adversely affect the environment.

### **Deposit of maps**

12. The Department shall keep available at its office in Calvert House, 23 Castle Place, Belfast BT1 1FY, at all reasonable times, for inspection by the public free of charge—

(a) the maps referred to in the definition of "estuary" in regulation 2(1);and

(b) the maps showing sensitive areas and high natural dispersion areas maintained for the purposes of regulation 3.

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

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

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

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

R. W. Rogers

Assistant Secretary

16th January 1995.