

SCHEDULE 1

Regulation 3

PART I

CRITERIA FOR IDENTIFICATION OF SENSITIVE AREAS

Commencement Information

II Sch. 1 Pt. 1 in operation at 1.4.2007, see [reg. 1](#)

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 [^{F1}50mg/l of nitrates in 95% of the samples] if action is not taken;
- (c) areas where further treatment than secondary or equivalent treatment is necessary to fulfil [^{F2}retained EU law] .

Textual Amendments

- F1** Words in Sch. 1 Pt. 1(b) substituted (24.12.2018) by [The Environment \(Miscellaneous Amendments\) Regulations \(Northern Ireland\) 2018 \(S.R. 2018/200\)](#), reg. 1(1), [Sch. 2 para. 4](#)
- F2** Words in Sch. 1 Pt.1(c) substituted (31.12.2020) by [The Water \(Amendment\) \(Northern Ireland\) \(EU Exit\) Regulations 2019 \(S.I. 2019/112\)](#), regs. 1(1), [5\(4\)](#); 2020 c. 1, Sch. 5 para. 1(1)

PART II

CRITERIA FOR IDENTIFICATION OF HIGH NATURAL DISPERSION AREAS

Commencement Information

I2 Sch. 1 Pt. 2 in operation at 1.4.2007, see [reg. 1](#)

Changes to legislation: There are currently no known outstanding effects for the The Urban Waste Water Treatment Regulations (Northern Ireland) 2007. (See end of Document for details)

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.

.....
Commencement Information

I3 Sch. 2 para. 1 in operation at 1.4.2007, see [reg. 1](#)

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.

.....
Commencement Information

I4 Sch. 2 para. 2 in operation at 1.4.2007, see [reg. 1](#)

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.

.....
Commencement Information

I5 Sch. 3 Pt. 1 para. 1 in operation at 1.4.2007, see [reg. 1](#)

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.

Commencement Information

I6 Sch. 3 Pt. 1 para. 2 in operation at 1.4.2007, see [reg. 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.

Commencement Information

I7 Sch. 3 Pt. 1 para. 3 in operation at 1.4.2007, see [reg. 1](#)

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 [^{F3}retained EU law].

Textual Amendments

F3 Words in [Sch. 3 Pt. 1 para. 4](#) substituted (31.12.2020) by [The Water \(Amendment\) \(Northern Ireland\) \(EU Exit\) Regulations 2019 \(S.I. 2019/112\)](#), regs. 1(1), **5(5)**; 2020 c. 1, Sch. 5 para. 1(1)

Commencement Information

I8 Sch. 3 Pt. 1 para. 4 in operation at 1.4.2007, see [reg. 1](#)

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 ₅ at	25 mg/l O ₂	70-90	Homogenized, unfiltered, undecanted

(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 BOD₅ 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.

Changes to legislation: There are currently no known outstanding effects for the The Urban Waste Water Treatment Regulations (Northern Ireland) 2007. (See end of Document for details)

<i>Parameters</i>	<i>Concentration</i>	<i>Minimum percentage of reduction⁽⁰⁰¹⁾</i>	<i>Reference method of measurement</i>
20°C) without nitrification ⁽⁰⁰²⁾			sample. Determination of dissolved oxygen before and after five-day incubation at 20°C ± 1°C, in complete darkness. Addition of a nitrification inhibitor.
Chemical oxygen demand (COD)	125 mg/l O ₂	75	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 BOD₅ 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.

Changes to legislation: There are currently no known outstanding effects for the The Urban Waste Water Treatment Regulations (Northern Ireland) 2007. (See end of Document for details)

<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 + NH₃), nitrate (NO₃)-nitrogen and nitrite (NO₂)-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.

Commencement Information

19 Sch. 3 Pt. 1 para. 5 in operation at 1.4.2007, see [reg. 1](#)

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.

Commencement Information

I10 Sch. 3 Pt. 3 para. 1 in operation at 1.4.2007, see [reg. 1](#)

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.

Commencement Information

I11 Sch. 3 Pt. 3 para. 2 in operation at 1.4.2007, see [reg. 1](#)

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;

p.e.:

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;

p.e.:

—50,000 p.e. or over: 24 samples.

Commencement Information

I12 Sch. 3 Pt. 3 para. 3 in operation at 1.4.2007, see [reg. 1](#)

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.

Commencement Information

I13 Sch. 3 Pt. 3 para. 4 in operation at 1.4.2007, see [reg. 1](#)

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 permitted number of samples which fail to conform</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

Changes to legislation: There are currently no known outstanding effects for the The Urban Waste Water Treatment Regulations (Northern Ireland) 2007. (See end of Document for details)

<i>Series of samples taken in any year</i>	<i>Maximum permitted number of samples which fail to conform</i>
318-334	23
335-350	24
351-365	25

Commencement Information

I14 Sch. 3 Pt. 3 para. 5 in operation at 1.4.2007, see [reg. 1](#)

SCHEDULE 4

Regulation 9

INDUSTRIAL WASTE WATER

Commencement Information

I15 Sch. 4 in operation at 1.4.2007, see [reg. 1](#)

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 [^{F4}retained EU law] ; and
- ensure that sludge can be disposed of safely in an environmentally acceptable manner.

Textual Amendments

F4 Words in [Sch. 4](#) substituted (31.12.2020) by [The Water \(Amendment\) \(Northern Ireland\) \(EU Exit\) Regulations 2019 \(S.I. 2019/112\)](#), regs. 1(1), [5\(6\)](#); 2020 c. 1, [Sch. 5 para. 1\(1\)](#)

SCHEDULE 5

Regulation 10

INDUSTRIAL SECTORS REFERRED TO IN REGULATION 10

1. Milk processing.

Commencement Information

I16 Sch. 5 para. 1 in operation at 1.4.2007, see [reg. 1](#)

2. Manufacture of fruit and vegetable products.

Commencement Information

I17 Sch. 5 para. 2 in operation at 1.4.2007, see [reg. 1](#)

3. Manufacture and bottling of soft drinks.

Commencement Information

I18 Sch. 5 para. 3 in operation at 1.4.2007, see [reg. 1](#)

4. Potato processing.

Commencement Information

I19 Sch. 5 para. 4 in operation at 1.4.2007, see [reg. 1](#)

5. Meat industry.

Commencement Information

I20 Sch. 5 para. 5 in operation at 1.4.2007, see [reg. 1](#)

6. Breweries.

Commencement Information

I21 Sch. 5 para. 6 in operation at 1.4.2007, see [reg. 1](#)

7. Production of alcohol and alcoholic beverages.

Commencement Information

I22 Sch. 5 para. 7 in operation at 1.4.2007, see [reg. 1](#)

8. Manufacturer of animal feed from plant products.

Commencement Information

I23 Sch. 5 para. 8 in operation at 1.4.2007, see [reg. 1](#)

9. Manufacture of gelatine and of glue from hides, skin and bones.

Commencement Information

I24 Sch. 5 para. 9 in operation at 1.4.2007, see [reg. 1](#)

10. Malt-houses.

Changes to legislation: There are currently no known outstanding effects for the The Urban Waste Water Treatment Regulations (Northern Ireland) 2007. (See end of Document for details)

Commencement Information

I25 Sch. 5 para. 10 in operation at 1.4.2007, see [reg. 1](#)

11. Fish-processing industry.

Commencement Information

I26 Sch. 5 para. 11 in operation at 1.4.2007, see [reg. 1](#)

Changes to legislation:

There are currently no known outstanding effects for the The Urban Waste Water Treatment Regulations (Northern Ireland) 2007.