

# STATUTORY INSTRUMENTS.

S.I. No. 403 of 2025

URBAN WASTEWATER (NUTRIENT-SENSITIVE AREAS) REGULATIONS 2025

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I, DARRAGH O'BRIEN, Minister for Climate, Energy and the Environment (as adapted by the Environment, Climate and Communications (Alteration of Name of Department and Title of Minister) Order 2025 (S.I. No. 235 of 2025)) in exercise of the powers vested on me by sections 6 and 59 of the Environmental Protection Agency Act 1992 (No. 7 of 1992), and for the purpose of giving further effect to Council Directive 91/271/EEC of 21 May 1991<sup>1</sup> and Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000<sup>2</sup>, both as amended, hereby make the following regulations:

#### Citation

1. These Regulations may be cited as the Urban Wastewater (Nutrient-Sensitive Areas) Regulations 2025.

### Interpretation

2. (1) In these Regulations—

"agglomeration" means an area where the population or economic activities are sufficiently concentrated for urban wastewater to be collected and conducted to an urban wastewater 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 wastewater:

"domestic wastewater" means wastewater 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 freshwater and coastal waters;

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

"population equivalent" means a measurement of organic biodegradable load where—

(a) a population equivalent of one (one p.e.) means the organic biodegradable load having a five-day biochemical oxygen demand (BOD5) of 60g of oxygen per day, and

<sup>&</sup>lt;sup>1</sup> OJ No. L 135, 30.05.1991, p. 40.

<sup>&</sup>lt;sup>2</sup> OJ No. L 327, 22.12.2000, p. 1.

- (b) 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 wastewater by a process generally involving biological treatment with a secondary settlement or other process in which the requirements established in Part 1 of Schedule 2 are respected;
- "sensitive areas" means those areas specified in Schedule 3 and such other areas in the State as may be identified for the purposes of Article 5 of the Wastewater Treatment Directive;
- "sludge" means residual sludge, whether treated or untreated, from urban wastewater treatment plants;
- "Uisce Éireann" means the private company limited by shares formed and established under the Companies Acts in accordance with section 4 of the Water Services Act 2013 (No. 6 of 2013);
- "urban wastewater" means domestic wastewater or the mixture of domestic wastewater with industrial wastewater or run-off rain water;
- "Wastewater Treatment Directive" means Council Directive 91/271/EEC of the European Council of 21 May 1991<sup>1</sup> concerning urban waste-water treatment.
- (2) A word or expression that is used in these Regulations and also used in Wastewater Treatment Directive or in Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000<sup>2</sup> has, unless the contrary intention appears, the same meaning in these Regulations as in those Directives, as the case may be.

# **Collection system**

- 3. (1) Subject to paragraphs (2) and (3), Uisce Éireann shall provide a collecting system for urban wastewater for every agglomeration with a population equivalent of 2,000 persons or more.
- (2) A collecting system required under paragraph (1) shall satisfy the requirements of Schedule 1.
- (3) Paragraph (1) shall not apply where the provision of a collecting system is not justified, either because it would produce no environmental benefit, or because it would involve excessive cost, provided that Uisce Éireann is satisfied that individual systems or other appropriate systems are used which achieve the same level of environmental protection.

#### **Treatment**

4. (1) In the case of urban wastewater entering collecting systems, Uisce Éireann shall provide treatment plants which provide for secondary treatment or an equivalent treatment for all discharges to freshwaters and estuaries from agglomerations with a population equivalent of 2,000 persons or more.

- (2) Notwithstanding paragraph (1) and subject to paragraphs (3) and (4), Uisce Éireann shall provide treatment plants which provide more stringent treatment than secondary treatment or an equivalent treatment in respect of all discharges from agglomerations with a population equivalent of more than 10,000 persons into sensitive areas or into the relevant catchment areas of sensitive areas where the discharges contribute to the pollution of these areas.
- (3) Subject to paragraph (4), a discharge from a treatment plant required under paragraph (2) shall satisfy the requirements of Parts 1 and 2 of Schedule 2.
- (4) Paragraphs (2) and (3) shall not apply in respect of individual treatment plants where Uisce Éireann is satisfied that the minimum percentage of reduction of the overall load entering all urban wastewater treatment plants in a sensitive area is not less than 75% for total phosphorus and for total nitrogen.
- (5) The Environmental Protection Agency shall determine which parameter or parameters, depending on the local conditions, shall apply for the purpose of Part 2 of Schedule 2 and shall take the parameter, or parameters, into account when authorising a wastewater discharge for the purpose of the Waste Water Discharge (Authorisation) Regulations 2007 (S.I. No. 684 of 2007).

# More stringent requirements

5. Notwithstanding the provisions of Regulation 4, more stringent requirements than those specified in Parts 1 and 2 of Schedule 2 shall be applied by Uisce Éireann to discharges from a treatment plant where such requirements are required to ensure that the receiving waters satisfy any other relevant provisions implementing Directives of the European Union in the State.

### Sensitive areas

6. The water bodies specified in Schedule 3 are identified as sensitive areas for the purposes of these Regulations.

### Treatment plant requirements

- 7. (1) Uisce Éireann shall ensure that a treatment plant provided in compliance with the requirements of these Regulations is designed, constructed, operated and maintained to ensure sufficient performance under all normal local climatic conditions.
- (2) Seasonal variations of the load shall be taken into account when designing a treatment plant.
- (3) A treatment plant shall be so designed or modified that representative samples can be obtained of the incoming wastewater and of treated effluent before discharge to receiving waters.
- (4) A point of discharge of urban wastewater from a treatment plant shall be so chosen as to minimise the adverse effects on the receiving environment.

### Functions under other legislation

8. Uisce Éireann shall take all such steps, as may be appropriate, in discharge of its functions under sections 16 and 17 of the Local Government (Water Pollution) Act 1977 (No. 1 of 1977) and under section 97 of the Environmental Protection Agency Act 1992 (No. 7 of 1992), to ensure that the requirements of Schedule 4 are met with respect to the discharge of industrial wastewater and shall review, and if necessary revise, any licence concerned at regular intervals.

# **Monitoring**

- 9. (1) Uisce Éireann shall carry out, cause to be carried out, or arrange for, the monitoring of the following:
  - (a) discharges from urban wastewater treatment plants in accordance with the procedures set out in Schedule 5 in order to verify compliance with the requirements of these Regulations, as appropriate;
  - (b) waters subject to a discharge from an urban wastewater treatment plant where it can be expected that the receiving waters will be significantly affected.
- (2) The results of monitoring carried out under this Regulation shall be transmitted to the Environmental Protection Agency in such manner and at such times as that Agency shall direct.

#### **Consequential amendments**

- 10. (1) Regulation 2 of the European Communities (Waste Water Treatment) (Prevention of Odours and Noise) Regulations 2005 (S.I. No. 787 of 2005) is amended by substituting the following for the definition of waste water treatment plant:
- "'waste water treatment plant' means a wastewater treatment plant provided and operated by or on behalf of Uisce Éireann in accordance with the Urban Wastewater (Nutrient-Sensitive Areas) Regulations 2025 or otherwise and includes related pipes and accessories.",
- (2) Regulation 3 of the Waste Water Discharge (Authorisation) Regulations 2007 (as amended by Regulation 7 of European Union (Waste Water Discharge) Regulations 2020 (S.I. No. 214 of 2020)) is amended by substituting the following definition for the definition of Urban Waste Water Regulations:
- "' 'Urban Waste Water Regulations' means the Urban Wastewater (Nutrient-Sensitive Areas) Regulations 2025",
- (3) Article 7(b)(iii) of the European Communities Environmental Objectives (Surface Waters) Regulations 2009 (S.I. No. 272 of 2009) is amended by the substitution of "the Urban Wastewater (Nutrient-Sensitive Areas) Regulations 2025" for "the Urban Waste Water Treatment Regulations 2001 (S.I. No. 254 of

- 2001) as amended by the Urban Waste Water Treatment (Amendment) Regulations 2004 (S.I. No. 440 of 2004)".
- (4) Column (3) of entry no. 7 in the Table set out in the Schedule to the European Union (Resilience of Critical Entities) Regulations 2024 (S.I. No 559 of 2024) is amended by substituting "Urban Wastewater (Nutrient-Sensitive Areas) Regulations 2025" for "Urban Waste Water Treatment Regulations 2001 (S.I. No. 254 of 2001)".

#### Revocations

- 11. The following are revoked:
  - (a) the Urban Waste Water Treatment Regulations 2001 (S.I. No. 254 of 2001);
  - (b) the Urban Waste Water Treatment (Amendment) Regulations 2004 (S.I. No. 440 of 2004);
  - (c) the Urban Waste Water Treatment (Amendment) Regulations 2010 (S.I. No. 48 of 2010).

Regulation 3(2)

# Collecting Systems

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

Regulations 2, 4(3) and (5), and 5

# Urban Wastewater Treatment Plant Discharge Standards

Part 1

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

Parameters	Concentration		Reference method of measurement
Biochemical oxygen demand (BOD5 at 20° C) without nitrification (2)	25 mg/l O <sub>2</sub>	70-90	Homogenized, unfiltered, undecanted 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 <sub>2</sub>	75	Homogenized, unfiltered, undecanted sample Potassium dichromate
Total suspended solids	35 mg/l	90	- Filtering of a representative sample through a 0,45 um filter membrane. Drying at 105°C and weighing
			- Centrifuging of a representative sample (for at least five minutes with mean acceleration of 2,800 to 3,200 g), drying at 105°C and weighing

Part 2

Requirements for discharges from urban wastewater treatment plants to sensitive areas. One or both parameters may be applied depending on the local situation. The values for concentration or for the percentage of reduction shall apply.

Parameters	Concentration	Minimum percentage of reduction (1)	Reference method of measurement
Total phosphorus	2 mg/l P (10,000 - 100,000 p.e.)	80	Molecular absorption spectrophotometry
	1 mg/l P (more than 100,000 p.e.)		
Total nitrogen (2)	15 mg/l N (10,000 - 100,000 p.e.) ( <sup>3</sup> )	70-80	Molecular absorption spectrophotometry
	10 mg/l N (more than 100,000 p.e.) (3)		

- (1) Reduction in relation to the load of the influent.
- (2) Total nitrogen means the sum of total Kjeldahl nitrogen (organic and ammoniacal nitrogen), nitrate nitrogen and nitrite nitrogen.
- (3) These values for concentration are annual means as referred to in paragraph 4(c) of Schedule 5. However, the requirements for nitrogen may be checked using daily averages when it is proven, in accordance with paragraph 1 of that Schedule, that the same level of protection is obtained. In this case, the daily average shall not exceed 20 mg/l of total nitrogen for all the samples when the temperature of the effluent in the biological reactor is superior or equal to 12° C. The conditions concerning temperature can be replaced by a limitation on the time of operation to take account of regional climatic conditions.

# Regulations 2 and 6

# Sensitive Areas

Waterbody Name	Agglomeration
Shannon (Upper)_120	Athlone
Barrow_130	Athy
Barrow_140	
Barrow_150	
Upper Bandon Estuary	Bandon
Barrow_160	Carlow
Barrow_170	
Barrow_180	
Barrow_190	
Castlebar_020	Castlebar
Castlebar_030	
Castlebar_040	
Cullin	
Cavan_010	Cavan
Coalpit	
Derrygid	
Cavan_020	
Annalee_100	
Erne_080	
Oughter South	
Erne_090	
Clonakilty Harbour	Clonakilty
Suir_190	Clonmel

Waterbody Name	Agglomeration
Suir_200	
Suir_210	
Suir_220	
Upper Suir Estuary	
Middle Suir Estuary	
Lough Mahon	Cork City
Lee (Cork) Estuary Upper	
Lee (Cork) Estuary Lower	
Boyne Estuary	Drogheda
Castletown Estuary	Dundalk
Castletown_030	
Inner Dundalk Bay	
Colligan Estuary	Dungarvan
Boyne_020	Edenderry
Fergus_070	Ennis North
Upper Slaney Estuary	Enniscorthy
Barrow_120	Kildare
Nore_180	Kilkenny
Nore_190	
Nore_200	
Nore_210	
Nore_220	
Nore_230	
Nore_240	
Nore_250	

Waterbody Name	Agglomeration
Nore Estuary	
Barrow Nore Estuary Upper	
Ross Bay	Killarney
Leane	
Liffey_160	Leixlip
Liffey_170	
Liffey_180	
Liffey_190	
Camlin_060	Longford
Camlin_070	
Shannon (Upper)_080	
Shannon (Upper)_090	
Shannon (Upper)_100	
Ree	
Killinure	
Ballaghkeeran	
Coosan	
Shannon (Upper)_110	
Malahide Bay	Malahide
Blackwater (Munster)_140	Mallow
Blackwater (Munster)_150	
Blackwater (Munster)_160	
Blackwater (Munster)_170	
Blackwater (Munster)_180	
North Channel Great Island	Midleton

Waterbody Name	Agglomeration
Owenacurra Estuary	
Shambles_010	Monaghan
Blackwater (Monaghan)_040	
Brosna_030	Mullingar
Ennell	
Brosna _040	
Brosna _050	
Brosna _060	
Brosna _070	
Brosna _080	
Brosna _090	
Brosna _100	
Brosna _110	
Brosna _120	
Brosna _130	
Brosna _140	
Boyne_150	Navan
Boyne_160	
Boyne_170	
Boyne_180	
Nenagh_060	Nenagh
Nenagh_070	
Derg TN	
Derg HMWB	
New Ross Port	New Ross

Waterbody Name	Agglomeration
Liffey_100	Osberstown
Liffey_110	
Liffey_120	
Liffey_130	
Liffey_140	
Liffey_150	
Leixlip Reservoir	
Barrow_080	Portarlington
Barrow _090	
Barrow_100	
Barrow_110	
Triogue_020	Portlaoise
Triogue _030	
Triogue_040	
Barrow_050	
Barrow_060	
Barrow_070	
Liffey Estuary Lower	Ringsend
Liffey Estuary Upper	
Tolka Estuary	
Broadmeadow Water	Swords
Suir_080	Thurles
Suir_090	
Lee K Estuary	Tralee
Tullamore_040	Tullamore

Waterbody Name	Agglomeration
Lower Slaney Estuary	Wexford
Wexford Harbour	
Lower Blackwater M Estuary / Youghal Harbour	Youghal
Proules_020	Carrickmacross
Naglack	
Monalty	
Proules_030	
Lough Mahon (Harper's Island)	Carrigtwohill
Blackwater (Munster)_190	Fermoy
Blackwater (Munster)_200	
Blackwater (Munster)_210	
Upper Blackwater M Estuary	
Lower Bandon Estuary	Kinsale
Deel (Newcastlewest)_090	Newcastle West
Deel (Newcastlewest)_100	
Deel (Newcastlewest)_110	
Deel (Newcastlewest)_120	
Ara_030	Tipperary
Muckno	Castleblayney
Charleville Stream_010	Charleville
Charleville Stream_020	
Maigue_030	
Maigue_040	
Killybegs Harbour	Killybegs

Waterbody Name	Agglomeration
Upper Feale Estuary	Listowel
Cashen	
Barrow_200	Muinebheag & Leighlinbridge
Barrow_210	
Barrow_220	
Barrow_230	
Upper Barrow Estuary	
Hind_010	Roscommon
Hind_020	
Hind_030	
Little Brosna_020	Roscrea

Regulation 8

### Industrial Wastewater

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

- (a) protect the health of staff working in collecting systems and treatment plants,
- (b) ensure that collecting systems, wastewater treatment plants and associated equipment are not damaged,
- (c) ensure that the operation of a wastewater treatment plant and the treatment of sludge are not impeded,
- (d) ensure that discharges from treatment plants do not adversely affect the environment or prevent receiving waters from complying with other measures in the State implementing Directives of the European Union, and
- (e) ensure that sludge can be disposed of safely in an environmentally acceptable manner.

Regulation 9(1)(a)

Reference methods for monitoring and evaluation of results

- 1. Uisce Éireann shall ensure that a monitoring method is applied which corresponds at least with the level of requirements described in this Schedule. Alternative methods to those mentioned in paragraphs 2, 3 and 4 may be used provided that it can be demonstrated that equivalent results are obtained.
- 2. Flow-proportional 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 wastewater specified in these Regulations. 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.: (i) 12 samples during the first year in which the treatment plant concerned is operational;
  - (ii) 4 samples in subsequent years where it can be shown that the water during the previous year complied with the provisions of these Regulations;
  - (iii) where one sample of the 4, referred to in subparagraph (ii), fails in any year, 12 samples shall be taken in the immediately subsequent year.

10,000 to 49,999 p.e. 12 samples 50,000 p.e. or over 24 samples

- 4. The treated wastewater 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 Part 1 of Schedule 2, a maximum number of samples which are allowed to fail the requirements, expressed in concentrations or percentage reductions in Part 1 of Schedule 2, is set out in the Table 1 to paragraph 5;
  - (b) for the parameters in Part 1 of Schedule 2 expressed in concentrations, the failing samples taken under normal operating conditions shall not deviate from the parametric values by more than 100% but, for the parametric value in concentration relating

- to total suspended solids, deviations of up to 150% may be accepted;
- (c) for those parameters specified in Part 2 of Schedule 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 1

Series of samples taken in any year	Maximum permitted number of samples which fail to conform
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



GIVEN under my Official Seal, 1 August, 2025.

DARRAGH O'BRIEN, Minister for Climate, Energy and the Environment.

### **EXPLANATORY NOTE**

(This note is not part of the Instrument and does not purport to be a legal interpretation.)

These Regulations impose requirements in relation to discharges from urban wastewater treatment facilities, give further effect to Directive No. 91/271/EEC (the Urban Wastewater Treatment Directive) and Directive No. 2000/60/EC (the Water Framework Directive) and revoke the following;

- (a) the Urban Waste Water Treatment Regulations 2001 (S.I. No. 254 of 2001);
- (b) the Urban Waste Water Treatment (Amendment) Regulations 2004 (S.I. No. 440 of 2004);
- (c) the Urban Waste Water Treatment (Amendment) Regulations 2010 (S.I. No. 48 of 2010).

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