

Headquarters
P.O. Box 3000
Johnstown Castle Estate
County Wexford
Ireland

# WASTE WATER DISCHARGE LICENCE TECHNICAL AMENDMENT A

Licence Register Number:	D0033-01
Licensee:	Irish Water
Agglomeration:	Cork City

## Reasons for the Decision

The purpose of this Technical Amendment is to update the Glossary of Terms, Conditions and Schedules of the licence, as appropriate.

The Environmental Protection Agency (the Agency) is satisfied, on the basis of the information available, that subject to compliance with the conditions of licence Reg. No. D0033-01 granted on the 17/12/2009, as well as any amendments noted herein any discharge from the activity will comply with and not contravene any of the requirements of Regulation 6(3) of the *Waste Water Discharge (Authorisation) Regulations*, 2007, as amended.

A screening for Appropriate Assessment was undertaken to assess, in view of best scientific knowledge and the conservation objectives of the site, if the activity, individually or in combination with other plans or projects is likely to have a significant effect on a European Site(s). In this context, for the reasons set out below, the activity is not directly connected with or necessary to the management of the site as a European Site and it can be excluded on the basis of objective scientific information, that the activity, individually or in combination with other plans or projects, will have a significant effect on a European site, and accordingly the Agency determined that an Appropriate Assessment of the activity is not required, for the following reasons; the proposed amendments will not result in a material change to the nature or volume of the discharge(s) from the agglomeration.

## Technical Amendment

In pursuance of the powers conferred on it by Regulation 33(1)(c) of the *Waste Water Discharge (Authorisation) Regulations, 2007*, as amended, the Agency amends Licence Reg. No. D0033-01; granted to Irish Water, Colvill House, 24/26 Talbot Street, Dublin 1, by virtue of Section 17(4) of the Water Services (No. 2) Act 2013.

Henceforth, the licence shall be read in conjunction with the amendments set out below.

This technical amendment is limited to the following Glossary of Terms, Conditions and Schedules of Licence Reg. No. D0033-01.

## **Amendments**

## **Glossary of Terms**

Amend the Glossary terms as follows:

Daily	During all days when discharges are taking place; with at least one measurement/observation per day.
Maintain	Keep equipment, plant and infrastructure in a fit state, including such regular inspection, servicing, calibration and repair as may be necessary to perform its function.
Sample(s)	Unless the context of this licence indicates to the contrary, the term sample(s) shall include measurements taken by electronic instruments.
SSRS	Small Streams Risk Score.
Standard Method	A relevant CEN, ISO, National, or other internationally recognized test procedure such as detailed in the current edition of "Standard Methods for the Examination of Water and Wastewater" (published jointly by A.P.H.A. / A.W.W.A. / W.E.F.), a documented and validated in-house procedure based on the above sources that will ensure the provision of data of an equivalent scientific quality, or an alternative method as may be agreed with the Agency.

Insert new Glossary terms as follows:

BIM	Bord Iascaigh Mhara.
Competent Laboratory	A testing facility meeting the general management and technical requirements of EN ISO/IEC-17025 standard, or other equivalent standards accepted at international level and utilising methods of analysis, including laboratory, field, and on-line methods, which are validated and documented in accordance with the above standard(s) for the specific tests.
Environmental Pollution	Means, in relation to waste water discharges, the direct or indirect introduction, as a result of human activity, of waste water discharges, substances (including any explosive, liquid or gas) or polluting matter (including any poisonous or noxious matter) into waters which may endanger human health or harm the aquatic environment, and in particular—  (a) create a risk to waters, sediment, plants or animals, (b) deleteriously interfere with the quality of aquatic ecosystems or terrestrial ecosystems directly depending on aquatic ecosystems including by—

	<ul> <li>(i) rendering those or any other waters poisonous or injurious to fish, shellfish, spawning grounds or the food of any fish, or</li> <li>(ii) impairing the usefulness of the bed and soil of any waters as spawning grounds or impairing their capacity to produce the food of fish or shellfish,</li> <li>(c) impair or interfere with amenities and other legitimate uses of the water, or</li> <li>(d) result in the water failing to meet any environmental quality standards prescribed in regulations for the purpose of giving effect to the requirements of any Directive relating to the quality or use of water for the time being in force.</li> </ul>
FSAI	Food Safety Authority of Ireland.
Priority Substances	Those substances or groups of substances, identified by the Commission in accordance with Article 16(2) of the Water Framework Directive and listed in Tables 11 and 12 of Schedule 6 of the European Communities Environmental Objectives (Surface Waters) Regulations, 2009 that have been prioritised for action by the setting of environmental quality standards at Community level.
SFPA	Sea Fisheries Protection Authority.

### **Conditions of Licence**

#### Delete Condition 1.2.2:

This licence shall be technically amended, as and when considered by the Agency, to ensure compliance with such environmental quality standard as may be prescribed for surface water classification of the receiving water body.

#### Amend Condition 1.4 as follows:

The discharge(s) to waters from the waste water works shall be restricted to those listed and described in *Schedule A: Discharges*, of this licence and shall be as set out in the licence application or as modified under Condition 1.7 of this licence and subject to the conditions of this licence.

#### Amend Condition 2.1.2 as follows:

- (iv) For parameters Total Phosphorus and Total Nitrogen the annual mean of the samples shall not exceed the emission limit value. No individual result similarly calculated shall exceed the emission limit value by more than 20%.
- (v) For parameters other than pH, cBOD, COD, Suspended Solids, Total Phosphorus and Total Nitrogen; eight out of ten consecutive composite results shall not exceed the emission limit value. No individual result similarly calculated shall exceed the emission limit value by more than 20%.

#### Amend Condition 2.1.3 as follows:

### Discrete Sampling

No cBOD or COD grab sample value shall exceed the emission limit value by more than 100% and no Suspended Solids grab sample value shall exceed the emission limit value by more than 150%. For all other parameters, except pH and temperature, no grab sample value shall exceed the emission limit value by more than 20%.

#### Insert new Condition 3.6:

No discharge from the waste water works is permitted save under and in accordance with this licence.

#### Amend Condition 4.1 as follows:

4.1 The licensee shall carry out such sampling, analyses, measurements, examinations, maintenance and calibrations as set out below and in accordance with *Schedule B: Monitoring*, of this licence.

- 4.1.1 Analyses shall be undertaken by competent staff in accordance with documented operating procedures. Analysis for compliance purposes, including any sub-contracted analysis, shall be done by a competent laboratory.
- 4.1.2 Such procedures shall be assessed for their suitability for the test matrix and performance characteristics shall be determined.
- 4.1.3 Such procedures shall be subject to a programme of Analytical Quality Control verified by a competent third party using control standards with evaluation of test responses.

#### Amend Condition 4.2 as follows:

- 4.2 The licensee shall ensure that:
  - (i) Sampling and analysis for all parameters listed in the Schedules to this licence, and
  - (ii) Any reference measurement methods to calibrate automated measurement system

shall be carried out by an appropriate Standard Method.

Delete existing condition 4.12 and replace it with the new Condition 4.12 as set out below:

The licensee shall ensure that a person in charge or a nominated deputy shall be available to meet with authorised person(s) of the Agency at all reasonable times and shall allow access to the waste water works or other premises that the Agency reasonably considers may contain information pertaining to a discharge from those works.

#### Amend Condition 4.16 as follows:

The licensee shall carry out fortnightly monitoring of the influent stream to the waste water treatment plant for cBOD, COD, Suspended Solids, Total Nitrogen and Total Phosphorus in order to measure the mass loadings and removal efficiencies within the treatment plant.

#### Insert new Condition 4.19:

Where such ambient monitoring results are available from any other statutory body, including the Agency, the licensee may submit those results in fulfillment of the requirements of *Schedule B.4 Ambient Monitoring* of this licence.

#### Amend Condition 5.4 as follows:

The licensee shall complete the improvements as set out in Schedule C: Specified Improvement Programme, of this licence, by 22/12/2015 in order to ensure compliance with the emission limit values as set out in Schedule A: Discharges, of

this licence. The licensee shall report on the progress of completing the improvement works annually as part of the AER.

#### Amend Condition 5.6 as follows:

The licensee shall carry out an assessment of the impact of the discharge(s) from the waste water works on the microbiological quality (including viruses) of the shellfish in the adjacent designated shellfish waters in consultation with the Sea Fisheries Protection Authority (SFPA), the Marine Institute and Bord Iascaigh Mhara (BIM). The assessment, including a timeframe for installation of UV or other appropriate disinfection as considered necessary, shall be submitted to the Agency within 18 months of the date of grant of the licence where it is identified in the assessment that UV or other appropriate disinfection is required.

#### Amend Condition 5.7 as follows:

Where the assessment outlined in Condition 5.6 indicates that the discharge(s) are having a deleterious microbiological (including viruses) effect on the quality of shellfish in the adjacent designated shellfish waters, the licensee shall install UV or other appropriate disinfection system within the timeframe identified.

#### Insert new Condition 5.8:

Where a UV or other appropriate disinfection system is installed the licensee shall ensure that it is operating to the designed disinfection efficiency at all times. The disinfection efficiency of the system shall be measured to demonstrate that the system is operated within its design range. The records from this verification process shall be recorded and maintained.

# Replace Condition 6.1 to Condition 6.4 inclusive with the following new Condition 6.1:

The licensee shall notify the Agency's headquarters in Wexford, or to such other Agency office, as soon as practicable after the occurrence of any incident (as defined in this licence). This notification shall be in such format as specified in Guidance to Licensees/COA holders on the Notification, Management and Communication of Environmental Incidents issued by the Agency and as a minimum shall include the following: the date, time, location, details, nature, cause, extent and ranking of the incident, details on any vulnerable receptors, corrective action taken and plans to prevent a reoccurrence, and the steps taken to minimise any discharges and to carry out any necessary environmental clean-up. The following shall also be notified, as soon as practicable after the occurrence of any incident:

- Department of Agriculture, Food & the Marine in the case of discharges to receiving waters.
- Marine Institute (MI), Sea Fisheries Protection Authority (SFPA), Food Safety Authority (FSAI) and an Bord Iascaigh Mhara (BIM) in the case of discharges to or likely to impact a designated shellfish water.

#### Amend Condition 6.7 as follows:

The licensee shall as a minimum keep the following documents at the headquarters of the licensee or such office as may be agreed by the Agency:

- (i) the licence application and all associated documentation;
- (ii) the licence(s) relating to the discharge(s) to waters from the waste water works;
- (iii) the previous year's AER;
- (iv) records of all risk assessments, sampling, analyses, measurements, examinations, calibrations and maintenance carried out in accordance with the requirements of this licence and guidance produced by the Agency;
- (v) relevant correspondence with the Agency;
- (vi) up to date drawings/plans showing the location of key process and environmental infrastructure, including monitoring locations and discharge points;
- (vii) up to date operational procedures for all monitoring and control equipment necessary to give effect to this licence.

This documentation shall be available to the Agency for inspection at all reasonable times and shall be submitted to the Agency, as required, in such a format as may be requested, including electronic submittal of the information or a summary of such information.

## Schedules of the licence

## Amend Schedule A.1. Primary Waste Water Discharge as follows:

EDEN Code	Licence Code	Discharge Location	Receiving water name	WFD Receiving water
TPEFF0400D0033SW001	SW001	E 176683 N 69726	Lough Mahon	SW_060_0750

Parameter	Emission Limit Value
pH	6 - 9
Toxic Units	10
	mg/l
cBOD	25
COD	125
Suspended Solids	35
Total Phosphorus (as P)	2.5
Total Nitrogen (as N)	10 <sup>Note 1.2</sup>

The ELV applies from 01 January 2011. Note 1:

The ELV may be increased following any change in the status of Lough Mahon under the Urban Wastewater Treatment Regulations 2001 (as amended) and with the agreement of the Agency. Note 2:

## Amend Schedule A.2. Secondary Waste Water Discharges as follows:

EDEN Code	Licence Code	Discharge Location Receiving water name
TPEFF0400D0033SW002	SW002	E 167682 N 72062 River Lee

## Amend Schedule A.3. Discharges to be discontinued as follows:

EDEN Code	Discharge Point Code	Location	Name of Receiving Waters	Discharge shall cease from
TPEFF0400D0033SW096	SW096	St. Patrick's Bridge	River Lee	22 December 2015

### Amend Schedule B.1. Monitoring of Primary Waste Water Discharge as follows:

EDEN Code	Licence Code	Discharge Location
TPEFF0400D0033SW001	SW001	E 176683 N 69726

Parameter	Monitoring Frequency	Analysis Method/Technique	
Flow	Continuous Note 1	On-line flow meter with recorder	
pH Note 2	Daily	pH electrode/meter and recorder	
Carbonaceous Biochemical Oxygen Demand	Fortnightly Note 2	Standard Method	
Chemical Oxygen Demand	Fortnightly Note 2	Standard Method	
Suspended Solids	Fortnightly Note 2	Standard Method	
Total Nitrogen (as N)	Fortnightly Note 2	Standard Method	
Total Oxidised Nitrogen (as N)	Fortnightly Note 2	Standard Method	
Total Ammonia (as N)	Fortnightly Note 2	Standard Method	
Total Phosphorus (as P)	Fortnightly Note 2	Standard Method	
Orthophosphate (as P)	Fortnightly Note 2	Standard Method	
Priority Substances Note 3	As required	Standard Method	
Toxicity Note 4	As required	To be agreed by the Agency	
Visual Inspection	Daily	Sample and examine for colour, odour, oils, fats and greases	

Note 1: Total effluent volume discharged over the 24-hour period in which the composite sample is collected shall be recorded.

Note 2: The licensee shall provide a composite sampler within 3 months of date of grant of this licence. All samples thereafter shall be collected on a 24-hour flow proportional or time based composite sampling basis.

Note 3: The relevant priority substances or pollutants for monitoring shall be identified by the licensee by undertaking a risk based assessment in accordance with 'Guidance on the Screening for Priority Substances for Waste Water Discharge Licences' issued by the Agency. Monitoring for the identified priority substances or pollutants shall be carried out at least annually, unless a case for less frequent monitoring is agreed by the Agency.

Note 4: The number of toxic units (Tu) = 100/x hour EC/LC<sub>50</sub> in percentage vol/vol so that higher Tu values reflect greater

Note 4: The number of toxic units (Tu) = 100/x hour EC/LC<sub>50</sub> in percentage vol/vol so that higher Tu values reflect greater levels of toxicity. For test regimes where species death is not easily detected, immobilisation is considered equivalent to death.

Amend Schedule B.4. Ambient Monitoring, Receiving Water as follows:

Location:

M1 to M15 inclusive (Drawing No.WWLA-058)<sup>Note 1</sup> C5 to C9 inclusive (Drawing No. WWLA-059)<sup>Note 1</sup>

Parameter	Monitoring Frequency Note 2	Analysis Method/Technique
pH	Ten samples/year	pH electrode/meter
DO	Ten samples/year	DO probe
BOD	Ten samples/year	Standard Method
Temperature	Ten samples/year	Thermometer
Orthophosphate (as P)	Ten samples/year	Standard Method
Total oxidised nitrogen (as N)	Ten samples/year	Standard Method
Total Nitrogen (as N)	Ten samples/year	Standard Method
Ammonia	Ten samples/year	Standard Method
Priority Substances Note 3	As required	Standard Method

Note 1: The location of these monitoring points may be amended with the agreement of the Agency in accordance with Condition 4.18 or Condition 4.19.

Note 2: Ambient monitoring data is to be submitted to the Agency in accordance with Condition 4.17 of this licence.

Note 3: The relevant priority substances or pollutants for monitoring shall be identified by the licensee by undertaking a risk based assessment in accordance with 'Guidance on the Screening for Priority Substances for Waste Water Discharge Licences' issued by the Agency. Monitoring for the identified priority substances or pollutants shall be carried out at least annually,

unless a case for less frequent monitoring is agreed by the Agency

This technical amendment shall be cited as Amendment A to Waste Water Discharge Licence Register No. D0033-01 dated 17/12/2009 and is to be read in conjunction with that licence.

Sealed by the seal of the Agency on this the \_\_\_\_\_ day of month, 2014

PRESENT when the seal of the Agency was affixed hereto:

Mary Turner, Authorised Person

