



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

## WASTE WATER DISCHARGE LICENCE

<b>Licence Register Number:</b>	D0033-01
<b>Licensee:</b>	Cork City Council
<b>Agglomeration:</b>	Cork City

## ***INTRODUCTION***

This introduction is not part of the licence and does not purport to be a legal interpretation of the licence.

The application relates to the Cork City agglomeration. The agglomeration comprises of Cork City and adjacent townlands in Cork County such as Glanmire, Little Island, Watergrasshill, Douglas and Rochestown.

The waste water treatment plant is located at Carrigrennan on Little Island and was commissioned ca. 2005 with a capacity for an organic load of 413,000p.e. The industrial loading to the plant was not specified in the application. However the design capacity of the plant was based on 53% of total load coming from industrial sources. The current organic plant loading is estimated to be 254,000 p.e. The main discharge from the WWTP is located in Lough Mahon.

A total pipe network of approximately 530kms is in place with ~ 15% made up of separate foul and surface water sewers. The applicant identified an untreated secondary discharge into the River Lee, North Channel adjacent to St. Patrick's Bridge in the City Centre and thirty four pumping stations (PS) on the wastewater works, which have pumped overflows in the event of storm events or emergencies associated with the operation of the pumps. In addition, approximately fifty other stormwater overflow locations were identified.

The licence sets out in detail the conditions under which Cork City Council will control and manage the waste water discharges from the agglomeration covered by this licence. The licence requires appropriate remedial action, to be undertaken in order to address the secondary discharge at St. Patrick's Bridge. This remedial action will ensure that appropriate protection is afforded to the receiving water environment.

The legislation governing this licence relates specifically to, and is restricted to, the regulation and control of waste water discharges from the agglomeration. Therefore any odour or noise issue that may be associated with the waste water works including the treatment plant cannot be addressed by this licence.

The licence requires appropriate remedial action, within specified timeframes, to be undertaken in order to address each of the discharge locations within the agglomeration. This remedial action will ensure that appropriate protection is afforded to the receiving water environment.

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## ***Glossary of Terms***

All terms in this licence should be interpreted in accordance with the definitions in the Waste Water Discharge (Authorisation) Regulations, 2007, unless otherwise defined in this section.

<b>AER</b>	Annual Environmental Report.
<b>Agglomeration</b>	An area where the population or economic activities or both are sufficiently concentrated for a waste water works to have been put in place.
<b>Agreement</b>	Agreement in writing.
<b>Annually</b>	At least one measurement in any one year.
<b>Application</b>	The application for this licence.
<b>Attachment</b>	Any reference to Attachments in this licence refers to attachments submitted as part of the licence application.
<b>Biannually</b>	All or part of a period of six consecutive months.
<b>Biennially</b>	Once every two years.
<b>BOD</b>	5 day Biochemical Oxygen Demand (without nitrification suppression).
<b>CBOD</b>	5 day Carbonaceous Biochemical Oxygen Demand (with nitrification suppression).
<b>CEN</b>	Comité Européen De Normalisation – European Committee for Standardisation.
<b>COD</b>	Chemical Oxygen Demand.
<b>Combined approach</b>	In relation to a waste water works, means the control of discharges and emissions to waters whereby the emission limits for the discharge are established on the basis of the stricter of either or both, the limits and controls required under the Urban Waste Water Regulations, and the limits determined under statute or Directive for the purpose of achieving the environmental objectives established for surface waters, groundwater or protected areas for the water body into which the discharge is made.
<b>Daily</b>	During all days when discharges are taking place; with at least one measurement per day.
<b>Day</b>	Any 24 hour period.
<b>Discharge limits</b>	Those limits, specified for a particular parameter in <i>Schedule A: Discharges</i> of this licence.
<b>Discharge Point</b>	The point from which a waste water discharge occurs.
<b>DO</b>	Dissolved oxygen.

<b>Documentation</b>	Any report, record, result, data, drawing, proposal, interpretation or other document, in written or electronic form, that is required by this licence.
<b>DoEHLG</b>	Department of the Environment, Health and Local Government.
<b>Domestic Waste Water</b>	Waste water from residential settlements and services that originates predominantly from human metabolism and from household activities.
<b>Drawing</b>	Any reference to a drawing or drawing number means a drawing or drawing number contained in the application, unless otherwise specified in this licence.
<b>EMP</b>	Environmental Management Programme.
<b>Environmental damage</b>	As defined in Directive 2004/35/EC.
<b>EPA</b>	Environmental Protection Agency.
<b>Fortnightly</b>	A minimum of 24 times per year, at approximately two week intervals.
<b>GC/MS</b>	Gas chromatography/mass spectroscopy.
<b>ICP</b>	Inductively coupled plasma spectroscopy.
<b>Incident</b>	The following shall constitute an incident for the purposes of this licence: (i) any discharge that does not comply with the requirements of this licence; (ii) any incident with the potential for environmental contamination of surface water or groundwater, or posing an environmental threat to land, or requiring an emergency response by the relevant Water Services Authority.
<b>Industrial waste water</b>	Any waste water that is discharged from premises used for carrying on any trade or industry or other non-domestic use and excludes run-off rain water.
<b>Licensees</b>	Cork City Council and Cork County Council (Southern Division)
<b>Licensing Regulations</b>	Waste Water Discharge (Authorisation) Regulations 2007 (S.I. No. 684 of 2007).
<b>Local Authority</b>	Cork County Council.
<b>Maintain</b>	Keep in a fit state, including such regular inspection, servicing, calibration and repair as may be necessary to perform its function.
<b>Mass flow limit</b>	An emission limit value expressed as the maximum mass of a substance that can be emitted per unit time.
<b>Mass flow threshold</b>	A mass flow rate above which a concentration limit applies.

<b>Monthly</b>	A minimum of 12 times per year, at intervals of approximately one month.
<b>National Environmental Complaints Procedure</b>	As established under the National Environmental Enforcement Network.
<b>Population Equivalent</b>	A measurement of organic biodegradable load and a population equivalent of 1 (1 p.e.) means the organic biodegradable load having a five-day biochemical oxygen demand (BOD <sub>5</sub> ) of 60g of oxygen per day; the load being calculated on the basis of the maximum average weekly load entering the waste water works during the year, excluding unusual situations such as those due to heavy rain.
<b>Primary Discharge</b>	The discharge with the largest volume being discharged from the waste water works.
<b>PRTR</b>	Pollutant Release and Transfer Register.
<b>Quarterly</b>	All or part of a period of three consecutive months beginning on the first day of January, April, July or October.
<b>Regional Fisheries Board</b>	South Western Regional Fisheries Board.
<b>Sample(s)</b>	Unless the context of this licence indicates to the contrary, the term samples shall include measurements taken by electronic instruments.
<b>Secondary Discharge</b>	A potential, occasional or continuous discharge from the waste water works other than a primary discharge or a storm water overflow.
<b>SSRS</b>	Small Stream Risk Score.
<b>Specified discharges</b>	Those discharges listed in <i>Schedule A: Discharges</i> of this licence.
<b>Standard method</b>	A National, European or internationally recognised procedure (e.g., I.S. EN, ISO, CEN, BS or equivalent); or an in-house documented procedure based on the above references; a procedure as detailed in the current edition of "Standard Methods for the Examination of Water and Wastewater" (prepared and published jointly by A.P.H.A., A.W.W.A. & W.E.F.), American Public Health Association, 1015 Fifteenth Street, N.W., Washington DC 20005, USA; or an alternative method as may be agreed by the Agency.
<b>Storm water overflow</b>	A structure or device on a sewerage system designed and constructed for the purpose of relieving the system of excess flows that arise as a result of rain water or melting snow in the sewered catchment, the excess flow being discharged to receiving waters.
<b>The Agency</b>	Environmental Protection Agency.

<b>Waste Water</b>	Domestic waste water or the mixture of domestic waste water with industrial waste water.
<b>Waste Water Works</b>	Sewers and their accessories (or any part thereof) and all associated structural devices, including waste water treatment plants, which are owned by, vested in, controlled or used by a water services authority for the collection, storage, treatment or discharge of waste water.
<b>Water Services Authority</b>	Cork City Council and Cork County Council (Southern Division).
<b>Weekly</b>	During all weeks when discharges are taking place; with at least one measurement in any one week.
<b>WSIP</b>	Water Services Investment Programme.
<b>WWTP</b>	Waste water treatment plant.

## Decision & Reasons for the Decision

The Environmental Protection Agency is satisfied, on the basis of the information available, that subject to compliance with the conditions of this licence, any discharges from the agglomeration served by the waste water works will comply with and will not contravene any of the requirements of Regulation 6 of the Waste Water Discharge (Authorisation) Regulations, 2007.

In reaching this decision the Environmental Protection Agency has had regard to the requirements and objectives of Regulation 6 of the Regulations and has considered the application and supporting documentation received from the applicant, all submissions received from other parties and the report of its inspector.

In particular, the Agency has noted and given consideration to the following:

- (i) EIS for Midleton Agglomeration D0056-01
- (ii) EIS for Crosshaven-Carrigaline-Ringaskiddy Agglomeration in application data submitted for Licence Application Register Number D0057-01.



## Part I Schedule of Discharges Licensed

In pursuance of the powers conferred on it by the Waste Water Discharge (Authorisation) Regulations, 2007, the Environmental Protection Agency (the Agency), under Regulation 28(1) of the said Regulations grants this Waste Water Discharge Licence to Cork City Council, City Hall, Cork. The licence authorises the discharge of waste water from the waste water works servicing the Cork City agglomeration described below, subject to conditions listed in Part II, with the reasons therefor and the associated schedules attached thereto.

***Licensed Discharges, in accordance with the Second Schedule  
of the Waste Water Discharge (Authorisation) Regulations, 2007***

Discharges from agglomerations with a population equivalent of more than 10,000
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## Part II Conditions

### **Condition 1. Scope**

- 1.1 The lead authority for the purpose of this licence is Cork City Council.
- 1.2 Statutory Obligations
  - 1.2.1 This licence is for the purposes of Waste Water Discharge licensing under the Waste Water Discharge (Authorisation) Regulations, 2007, only and nothing in this licence shall be construed as negating the licensee's statutory obligations or requirements under any other enactments or regulations.
  - 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.
- 1.3 The agglomeration is the area outlined in red on Drawing No. GR (WWLA-057) of the application (data received 13<sup>th</sup> November 2009). Any reference in this licence to agglomeration shall mean the area thus outlined in red.
- 1.4 The primary and secondary discharges to waters from the waste water works shall be restricted to those listed and described in *Schedule A: Discharges*, 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.
- 1.5 The discharges to waters from the waste water works shall be controlled and managed and shall take place as set out in this licence. All programmes required to be carried out under the terms of this licence become part of this licence.
- 1.6 For the purposes of this licence, the locations of the waste water discharges authorised by this licence are as presented on Drawing No. WWLA-018 and Drawing No. WWLA-056 of the application (data received 28<sup>th</sup> November 2008).
- 1.7 No alteration to the waste water works or any part thereof that would, or is likely to, result in a material change to or increase in discharges sufficient to represent a risk of causing a breach of emission standards specified in the licence shall be carried out or commenced without prior notice to, and without the agreement of, the Agency.
- 1.8 Treatment Capacities
  - 1.8.1 The licensee shall, on an annual basis, undertake an assessment of the remaining organic and hydraulic treatment capacities within the waste water works (design capacity of plant, less flow-load calculation for representative period).
  - 1.8.2 The licensee shall maintain such available capacity within the waste water works as is necessary to ensure that there is no environmental risk posed to the receiving water environment as a result of the discharges.
  - 1.8.3 Where the licensee determines, as part of those assessments undertaken in Condition 1.8.1 above, that the remaining treatment capacity will be exceeded within the ensuing three year period, the licensee shall notify the Agency and seek a licence review, as appropriate.

Reason: To clarify the scope of this licence.

## Condition 2. Interpretation

2.1 Emission limit values for discharges to waters in this licence shall be interpreted in the following way:

2.1.1 Continuous Monitoring

- (i) No pH value shall deviate from the specified range.
- (ii) No temperature value shall exceed the limit value.
- (iii) No other parameter that is continuously monitored shall exceed the limit value.

2.1.2 Composite Sampling

- (i) No pH value shall deviate from the specified range.
- (ii) For cBOD and COD, no more than the relevant number of samples specified in *Schedule B.3: Interpretation of Discharge Monitoring Results* – Column 2 shall exceed the concentration Emission Limit Value based on the number of samples taken as listed in *Schedule B.3: Interpretation of Discharge Monitoring Results* – Column 1. No individual result similarly calculated shall exceed the emission limit value by more than 100%.
- (iii) For Suspended Solids, no more than the relevant number of samples specified in *Schedule B.3: Interpretation of Discharge Monitoring Results* – Column 2 shall exceed the concentration Emission Limit Value based on the number of samples taken as listed in *Schedule B.3: Interpretation of Discharge Monitoring Results* – Column 1. No individual result similarly calculated shall exceed the emission limit value by more than 150%.
- (iv) For Total Nitrogen and Total Phosphorus, the annual mean of the samples shall not exceed the Emission Limit Value
- (v) For parameters other than pH, flow, cBOD, COD & Suspended Solids 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%.

2.1.3 Discrete Sampling

For parameters other than pH, no grab sample value shall exceed the emission limit value by more than 150%.

Reason: To clarify the interpretation of limit values fixed under the licence.

### Condition 3. Discharges

- 3.1 No specified discharge from the waste water works shall exceed the emission limit values set out in *Schedule A: Discharges* of this licence, subject to the requirements of Condition 2 above.
- 3.2 The Water Services Authority shall take such measures as are necessary to ensure that no deterioration in the quality of the receiving waters shall occur as a result of the discharge.
- 3.3 There shall be no discharge from the discharge point specified in *Schedule A.3: Discharges to be Discontinued* from the dates specified therein.
- 3.4 Storm water overflows shall be as specified in *Schedule A.4: Storm Water Overflows* of this licence.
- 3.5 The licensee shall ensure that all or any of the following:
- Gross solids
  - Litter

associated with discharges from the waste water works do not result in an impairment of, or an interference with, amenities or the environment.

*Reason: To provide for the protection of the receiving environment including designated shellfish waters by way of control and limitation of discharges to the River Lee and to the marine environment in Lough Mahon.*

### Condition 4. Control and Monitoring

- 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.
- 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.

Where any analysis is sub-contracted it shall be to a competent laboratory.

- 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 in accordance with CEN standards. If CEN standards are not available, ISO, national or international standards that will ensure the provision of data of an equivalent scientific quality shall apply.

- 4.3 The licensee shall install on all emission points such sampling points or equipment, including any data-logging or other electronic communication equipment, as may be required by the Agency. All such equipment shall be consistent with the safe operation of all sampling and monitoring systems.
- 4.4 All automatic monitors and samplers shall be functioning at all times (except during maintenance and calibration) when the discharges are being made unless alternative sampling or monitoring has been agreed in writing by the Agency for a limited period. In the event of the malfunction of any continuous monitor, the licensee shall contact the Agency as soon as practicable and alternative sampling and monitoring facilities shall be put in place. Agreement for the use of alternative equipment, other than in emergency situations, shall be obtained from the Agency.
- 4.5 Monitoring and analysis equipment shall be operated and maintained as necessary so that monitoring accurately reflects the discharge (or ambient conditions where that is the monitoring objective).
- 4.6 In the case of composite sampling of the discharge from the waste water works, a separate composite sample or homogeneous sub-sample (of sufficient volume as advised by the Agency) shall be refrigerated immediately after collection and retained as required for Agency use.
- 4.7 The licensee shall clearly label and provide safe and permanent access to all on-site sampling and monitoring points and to off-site points as required by the Agency.
- 4.8 The licensee shall establish and maintain corrective action procedures and shall take corrective action should the specified requirements of this licence not be fulfilled. The responsibility and authority for persons initiating further investigation and corrective action in the event of a reported non-conformity with this licence shall be defined by the licensee.
- 4.9 The licensee shall establish and maintain a programme for maintenance and operation of all plant and equipment to ensure that no unauthorised waste water discharges take place. This programme shall be based on the instructions issued by the manufacturer/supplier or installer of the equipment. Appropriate record keeping and diagnostic testing shall support this maintenance programme. The licensee shall clearly allocate responsibility for the planning management and execution of all aspects of this programme to appropriate personnel.
- 4.10 The location, frequency, methods and scope of monitoring, sampling and analyses, as set out in this licence, may be amended with the agreement of the Agency following evaluation of test results.
- 4.11 Toxicity

The acute toxicity of the undiluted final effluent from the primary discharge point to at least four relevant aquatic species from different trophic levels shall be determined by standardised and internationally accepted procedures and carried out by a competent laboratory. Copies of the complete reports shall be submitted by the licensee to the Agency as part of the second AER and testing shall be repeated annually on the two most sensitive species. The report shall be submitted as part of the AER unless otherwise agreed with the Agency.

- 4.12 A representative sample of effluent from the primary discharge point shall be screened for the presence of organic compounds and metals within twelve months of the date of grant of this licence. The list of parameters for analysis shall include, as a minimum, those organic compounds and metals identified as relevant having regard to the Water Policy Regulations 2003 and amendments (S.I. No. 722 of 2003 and amendments) and any other relevant legislation. Such screening shall be repeated at intervals as requested by the Agency thereafter.
- 4.13 Storm water overflows
- 4.13.1 The licensee shall, prior to the date for submission of the second AER (required under Condition 6.1), carry out an investigation for the identification and assessment of storm water overflows. A report on the storm water overflows shall be submitted to the Agency as part of the second AER. The assessment shall include a determination of compliance with the criteria for storm water overflows, as set out in the DoEHLG 'Procedures and Criteria in Relation to Storm Water Overflows', 1995 and any other guidance as may be specified by the Agency.
- 4.13.2 The licensee shall carry out an assessment of storm water overflows at least once every three years thereafter and report to the Agency on each occasion as part of the AER. The assessment shall include a determination of compliance with the criteria for storm water overflows, as set out in the DoEHLG 'Procedures and Criteria in Relation to Storm Water Overflows', 1995 and any other guidance as may be specified by the Agency. The licensee shall maintain a written record of all assessments and remedial measures arising from the assessment.
- 4.14 The licensee shall prepare a PRTR report for the primary discharge. The substances to be included in the PRTR shall be as agreed by the Agency each year by reference to EC Regulation No. 166/2006 concerning the establishment of the European Pollutant and Transfer Register and amending Council Directives 91/689/EEC and 96/61/EC. The PRTR shall be prepared in accordance with any relevant guidelines issued by the Agency and shall be submitted electronically in specified format and as part of the AER.
- 4.15 The licensee shall, within six months of the date of grant of this licence, develop and establish a Data Management System for collation, archiving, assessing and graphically presenting the monitoring data generated as a result of this licence.
- 4.16 The licensee shall carry out monthly 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.
- 4.17 **The licensee shall report annually, in the AER, on the chemical and ecological status of the receiving waters. The licensee shall, as a minimum, have regard to the EC Environmental Objectives (Surface Waters) Regulations 2009 (S.I. No. 272 of 2009) and the EC (Quality of Shellfish Waters) Regulations 2006 as amended (S.I. No. 268 of 2006) in scoping the report. The licensee shall undertake such additional monitoring as is necessary to demonstrate that the discharges have not caused deterioration in the status of the receiving water. The licensee shall consult with the Agency on the scope of the report and the appropriate format for submittal.**
- 4.18 **The licensee shall review the locations of the monitoring points specified in Schedule B.4 Ambient Monitoring in line with the requirements of Condition**

4.17. If any amendments are proposed the licensee shall, in the AER, submit a revised map with alternative monitoring locations to be agreed with the Agency.

Reason: To provide for the protection of the environment by way of control and monitoring of discharges.

## Condition 5. Programmes of Improvements

- 5.1 The licensee shall, as a part of the second AER (required under Condition 6.11), prepare and submit to the Agency a programme of infrastructural improvements to maximise the effectiveness and efficiency of the waste water works in order to:
- a) achieve improvements in the quality of all discharges from the works;
  - b) meet the emission limit values specified in *Schedule A: Discharges*, of this licence;
  - c) give effect to Regulation 2 of the Waste Water Discharge (Authorisation) Regulations 2007 (S.I. No. 684 of 2007);
  - d) **reduce Total Nitrogen loadings in the discharge to the maximum practicable extent;**
  - e) **reduce Total Phosphorus loadings in the discharge to the maximum practicable extent;**
  - f) meet the obligations of Condition 1.8.
- 5.2 The programme of infrastructural improvements referred to in Condition 5.1 shall include an assessment of:
- a) the waste water treatment plant, having regard to the effectiveness of the treatment provided by reference to the following:
    - (i) the existing level of treatment, capacity of treatment plant and associated equipment;
    - (ii) the emission limit values specified in *Schedule A: Discharges*, of this licence;
    - (iii) designations of the receiving water body;
    - (iv) downstream abstractions and uses of water;
    - (v) water quality objective for the receiving water body;
    - (vi) the standards and volumetric limitations applied to any industrial waste water that is licensed to discharge to the waste water works.
  - b) the integrity of the waste water works having regard to:
    - (i) capacity of the waste water works **and discharge of partially treated effluent;**
    - (ii) leaks from the waste water works;
    - (iii) misconnections between foul sewers and surface water drainage network;

- (iv) infiltration by surface water;
    - (v) infiltration by groundwater/seawater;
    - (vi) such other aspects of the works as may be specified by the Agency.
  - c) the secondary discharge from the waste water works to evaluate options for the discontinuation of the discharge. The assessment shall include a detailed quantification of the impact of the discharge on:
    - (i) designations of the receiving water body;
    - (ii) down stream uses of water;
    - (iii) water quality objective for the receiving water body.
  - d) all storm water overflows associated with the waste water works to determine the effectiveness of their operation and in particular to identify improvements necessary to comply with the requirements of this licence.
- 5.3 The programme of infrastructural improvements shall include a plan for implementation for each individual improvement identified. The plan for implementation shall:
- a) in the case of the assessment carried out under Conditions 5.2(a) (waste water treatment plant), 5.2(c) (secondary discharge) and 5.2(d) (storm water overflows):
    - (i) clearly identify and describe the improvement and the timeframe for implementation;
    - (ii) specify the parametric emission(s) that will be affected by the implementation of the improvement;
    - (iii) estimate the costs and sources of funding required to implement the improvement including, where appropriate, details of submissions made to the Department of the Environment, Heritage and Local Government and sanctions received;
    - (iv) identify the anticipated improvements in the quality of the receiving waters as a result of the implementation of the improvement.
  - b) in the case of the assessment carried out under Condition 5.2(b) (waste water works):
    - (i) identify, evaluate and describe the infrastructural works necessary to implement those works listed under *Schedule C: Specified Improvement Programme*;
    - (ii) clearly identify and describe the improvement and the timeframe for its implementation;
    - (iii) estimate the costs and sources of funding required to implement the improvement including, where appropriate, details of submissions made to the Department of the Environment, Heritage and Local Government and sanctions received.
- 5.4 The licensee shall complete the improvements as set out in *Schedule C: Specified Improvement Programme* by 31/12/2015 in order to ensure compliance with the emission limit values as set out in *Schedule A: Discharges* of this licence.
- 5.5 The licensee shall put in place a programme of measures for the gathering, recording and retention of information in relation to the infrastructural components of the waste



water works. This information shall be in the form of 'As-Constructed' drawings and electronic mapping tools, or in any other format as required by the Agency.

- 5.6 **The licensee shall carry out an assessment of the impact of the discharges from the waste water works on the microbiological quality (including viruses) of the shellfish in the adjacent designated shellfish waters in consultation with the DoEHLG, Sea Fisheries Protection Authority, the Marine Institute and An Bord Iascaigh Mhara. The report on the assessment should include a review of hydrodynamic and modelling assessments completed for the purposes of the discharge specified in this licence and relevant assessments of other discharges to Cork Harbour. The report shall be submitted to the Agency within eighteen months of the date of grant of the licence.**
- 5.7 **Where the report specified in Condition 5.6 indicates that the discharges are having a deleterious microbiological (including viruses) effect on the quality of shellfish in the adjacent designated shellfish waters, the licensee shall implement the recommendations of the report including the installation of a disinfection system or other appropriate measure, as required.**

*Reason: To provide for the improvement of the waste water works on a planned basis having regard to the need for ongoing assessment, recording and reporting of matters affecting the receiving water environment.*

## **Condition 6. Notifications, Records and Reports**

- 6.1 The licensee, shall notify the Agency by both telephone and facsimile, to the Agency's headquarters in Wexford, or to such other Agency office as may be specified by the Agency, as soon as practicable after the occurrence of any incident (as defined in this licence). The licensee shall include as part of the notification, date and time of the incident, summary details of the occurrence, and where available, the steps taken to minimise any discharges.
- 6.2 In the case of any incident relating to a discharge to water, the licensee shall notify either the Regional Fisheries Board or the Department of Agriculture, Fisheries and Food and the relevant downstream WSA as soon as practicable after such an incident.
- 6.3 In the case of any incident relating to a discharge **which may affect a designated shellfish water**, the licensee shall notify **the Marine Institute, the Sea Fisheries Protection Authority, Food Safety Authority and An Bord Iascaigh Mhara**, as soon as practicable after such an incident.
- 6.4 The licensee shall make a record of any incident. This record shall include details of the nature, extent, and impact of, and circumstances giving rise to, the incident. The record shall include all corrective actions taken to manage the incident, to minimise the effect on the environment, and to avoid recurrence. The licensee shall, as soon as practicable following incident notification, submit to the Agency the incident record including clean up and recurrence prevention measures.
- 6.5 The licensee shall record all complaints of an environmental nature related to the discharges to waters from the waste water works in accordance with the national environmental complaints procedure. Each such record shall give details of the date and time of the complaint, the name of the complainant (if provided), and the nature of the complaint. A record shall also be kept of the response made in the case of each complaint.

- 6.6 The licensee shall record all sampling, analyses, measurements, examinations, calibrations and maintenance carried out in accordance with the requirements of this licence.
- 6.7 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 relating to the discharges to waters from the waste water works;
  - (iii) the previous year's AER;
  - (iv) records of all sampling, analyses, measurements, examinations, calibrations and maintenance carried out in accordance with the requirements of this licence;
  - (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.

- 6.8 The licensee shall, within six months of date of grant of this licence, ensure that a documented Emergency Response Procedure is in place, that addresses any emergency situation that may originate on-site. This procedure shall include provision for minimising the effects of any emergency on the environment. This procedure shall be reviewed annually and updated as necessary.
- 6.9 The licensee shall establish and maintain a Public Awareness and Communications Programme to ensure that members of the public can obtain, at all reasonable times, environmental information relating to the discharge.
- 6.10 Unless otherwise agreed by the Agency, all reports and notifications submitted to the Agency shall:
- (i) be sent to Administration, Office of Environmental Enforcement (OEE) at the Agency's Headquarters or to such other Agency office agreed by the Agency;
  - (ii) comprise one original and two copies unless additional copies are required by Agency;
  - (iii) be formatted in accordance with any written instruction or guidance issued by the Agency;
  - (iv) include whatever information may be required by the Agency;
  - (v) be identified by a unique code, indicate any modification or amendment, and be correctly dated to reflect any such modification or amendment;
  - (vi) be accompanied by a written interpretation setting out their significance in the case of all monitoring data; and
  - (vii) be transferred electronically to the Agency's computer system if required by the Agency.
- 6.11 The licensee shall submit to the Agency, by the 28<sup>th</sup> February of each year, an AER covering the previous calendar year. This report, which shall be to the satisfaction of the Agency, shall include as a minimum the information specified in *Schedule D*:

*Annual Environmental Report* of this licence and shall be prepared in accordance with any relevant guidelines issued by the Agency.

- 6.12 All reports shall be certified accurate and representative by the Director of Services or a nominated, suitably qualified and experienced deputy.
- 6.13 The licensee shall notify the Agency, as soon as is practicable, where a discharge from the waste water works has ceased permanently.

<p><i>Reason: To provide for the collection and reporting of adequate information on the activity.</i></p>
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## **Condition 7. Financial Charges and Provisions**

### **7.1 Agency Charges**

- 7.1.1 The licensee shall pay to the Agency an annual contribution of €7,056, or such sum, as the Agency from time to time determines, having regard to variations in the extent of reporting, auditing, inspection, sampling and analysis or other functions carried out by the Agency, towards the cost of monitoring the discharge as the Agency considers necessary for the performance of its functions under the Waste Water Discharge (Authorisation) Regulations 2007. The first payment shall be a pro-rata amount for the period from the date of this licence to the 31<sup>st</sup> day of December, and shall be paid to the Agency within one month from the date of the licence. In subsequent years the licensee shall pay to the Agency such revised annual contribution as the Agency shall from time to time consider necessary to enable performance by the Agency of its relevant functions under the Waste Water Discharge (Authorisation) Regulations 2007 and all such payments shall be made within one month of the date upon which demanded by the Agency.
- 7.1.2 In the event that the frequency or extent of monitoring, investigations or other functions carried out by the Agency needs to be increased, the licensee shall contribute such sums as determined by the Agency to defray its costs in regard to items not covered by the said annual contribution.

### **7.2 Environmental Liabilities**

- 7.2.1 The licensee shall as part of the AER provide an annual statement as to the measures taken or adopted in relation to the prevention of environmental damage, and the financial provisions in place in relation to the underwriting of costs for remedial actions following anticipated events (including closure) or accidents/incidents, as may be associated with discharges or overflows from the waste water works.
- 7.2.2 The licensee shall arrange for the completion, by an independent and appropriately qualified consultant, of a comprehensive and fully costed Environmental Liabilities Risk Assessment (ELRA) to address the liabilities from present or planned discharges. A report on this assessment shall be submitted to the Agency for agreement as part of the second AER (required under Condition 6.11). The ELRA shall be reviewed as necessary to reflect any significant change to the volume or character of effluent discharged, and in any case every three years following initial agreement (the results of the review shall be notified as part of the AER).
- 7.2.3 As part of the measures identified in Condition 7.2.1 the licensee shall, to the satisfaction of the Agency, make financial provision to cover any liabilities identified in Condition 7.2.2. The amount of indemnity held shall be reviewed and revised as necessary, but at least triennially. Proof of renewal or revision of such financial indemnity shall be included in the annual 'Statement of Measures' report identified in Condition 7.2.1.
- 7.2.4 The licensee shall have regard to the Environmental Protection Agency Guidance on Environmental Liability Risk Assessment, Residuals

Management Plans and Financial Provision when implementing Conditions 7.2.1, 7.2.2 and 7.2.3 above.

*Reason: To provide for adequate financing for monitoring and financial provisions for measures to protect the environment.*

## SCHEDULE A: Discharges

### A.1 Primary Waste Water Discharge

Primary Discharge Point Code: WWTP1  
 Name of Receiving Waters: Lough Mahon (SW\_060\_0750)  
 Location: 176683E 69726N

Parameter	Emission Limit Value
pH	6 - 9
Toxic Units	10
	mg/l
CBOD	25
COD	125
Suspended Solids	35
Total Phosphorus	2.5
Total Nitrogen	10 <sup>Note 1</sup>

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.



### A.2 Secondary Waste Water Discharges

Discharge Point Code: SD02  
 Name of Receiving Waters: River Lee  
 Location: 167682E 72062N

### A.3 Discharges to be discontinued

Discharge Point Code	Location	Name of Receiving Waters	Discharge shall cease from
SD02	St. Patrick's Bridge	River Lee	22 December 2015



### A.4 Storm Water Overflows

Discharges from storm water overflows shall be as specified in Table B5 of the application data received on 28<sup>th</sup> November 2008.



## SCHEDULE B: Monitoring

### B.1 Monitoring of Primary Waste Water Discharge

Primary Discharge Point Code: WWTP1

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

**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 install a composite sampler within three months of date of grant of this licence. All samples thereafter shall be collected on a 24-hour flow proportional composite sampling basis.

**Note 3:** Having identified the most relevant pollutants from screening (Condition 4.12), subsequent monitoring for these pollutants shall be carried out at a frequency 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 levels of toxicity. For test regimes where species death is not easily detected, immobilisation is considered equivalent to death.



### B.2 Monitoring of Secondary Waste Water Discharge

**No monitoring of secondary discharges is required in this licence and the discharge from SD02 shall cease from 22<sup>nd</sup> December 2015.**

**B.3 Interpretation of Discharge Monitoring Results**

No of samples taken in any one year <sup>Note 1</sup>	Maximum number of samples which may exceed ELV
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

**Note 1:** Where the licensee has taken samples which exceed the number specified in this Schedule, the licensee shall submit to the Agency all results of analysis.



**B.4 Ambient Monitoring****Receiving Water Monitoring**

**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>

<b>Parameter</b>	<b>Monitoring Frequency</b> <sup>Note 2</sup>	<b>Analysis Method/Technique</b>
<b>pH</b>	Ten samples/year	pH electrode/meter
<b>DO</b>	Ten samples/year	DO probe
<b>BOD</b>	Ten samples/year	Standard Method
<b>Temperature</b>	Ten samples/year	Thermometer
<b>Orthophosphate (as P)</b>	Ten samples/year	Standard Method
<b>Total oxidised nitrogen (as N)</b>	Ten samples/year	Standard Method
<b>Total Nitrogen (as N)</b>	Ten samples/year	Standard Method
<b>Ammonia</b>	Ten samples/year	Standard Method
<b>Metals and Organic Compounds</b>	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

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



## SCHEDULE C: Specified Improvement Programme

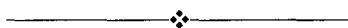
### C.1 Improvement Programme for Primary Discharge

Specified Improvement	Completion Date
Infiltration and inflow programme	22 <sup>nd</sup> December 2015
Identification and improvement of operation of CSO and emergency overflows	To be agreed
Any other works notified in writing by the Agency	As agreed



### C.2 Improvement Programme for Secondary Discharge

Specified Improvement	Completion Date
Cessation of discharge from SD02	22 <sup>nd</sup> December 2015
Any other works notified in writing by the Agency	As agreed



### C.3 Improvement Programme for Storm Water Overflows

Discharge Point Code	Specified Improvement	Completion Date
As specified in Table B5 of the application data received on 28 <sup>th</sup> November 2008.	Meet requirements of DoEHLG 'Procedures and Criteria in Relation to Storm Water Overflows', 1995	22 <sup>nd</sup> December 2015
Any other overflows notified in writing by the Agency		As agreed



## SCHEDULE D: Annual Environmental Report

### Annual Environmental Report Content <sup>Note 1</sup>

Discharges from the agglomeration.  
Summary report on monthly influent monitoring.  
Data collection and reporting requirements under the Urban Waste Water Treatment Directive.  
Complaints summary.  
Pollutant Release and Transfer Register - report for previous year.  
Pollutant Release and Transfer Register - proposal for current year.  
Ambient monitoring summary and revised maps where applicable.  
Storm water overflow identification and inspection report.  
Reported incidents summary.  
Report on progress made and proposals being developed to meet the improvement programme requirements. <sup>Note 2</sup>  
Development/Infrastructural works summary (completed in previous year or prepared for current year).  
Any other items specified by the Agency.

**Note 1:** Content may be revised subject to the agreement of the Agency.

**Note 2:** This summary report shall provide detail on all measures proposed and undertaken under the Water Services Investment Programme for the agglomeration, including progress reports on infrastructural works and a statement of compliance with timeframes set out in this licence.

#### Sign Off for Final Licences/Decisions

Sealed by the seal of the Agency on this the \*\* day of \*\* 200\*.

**PRESENT** when the seal of the Agency  
was affixed hereto:

\_\_\_\_\_  
**XXXX Director/Authorised Person**

