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County Wexford
Ireland

WASTE WATER DISCHARGE LICENCE

RECOMMENDED LICENCE

Licence Register Number:	D0057-01
Licensee:	Cork County Council Southern Division
Agglomeration:	Crosshaven-Carrigaline-Ringaskiddy

INTRODUCTION

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

This licence relates to the Crosshaven-Carrigaline-Ringaskiddy agglomeration. The agglomeration comprises of a number of distinct areas: Crosshaven village, Carrigaline town, Shanbally village and includes treated trade effluent from five IPPC industries in the Ringaskiddy area. Waste water in the agglomeration is collected in a partially combined foul and separated foul sewage drainage network.

There is currently no waste water treatment plant and except for treated trade effluent, the waste water discharges untreated. The population equivalent (p.e.) is stated as 97,556 of which 14,864 p.e. is domestic and the remainder is non-domestic (82,692 p.e.).

The works currently comprises of six pumping stations. The primary discharge (SW01Ring) is to Lower Cork Harbour, 2.6km from shore near Dognose bank and at a depth of 30m. A flushing pump keeps the deep-water outfall clear. It is estimated that there are 1,300 dilutions available in the immediate proximity of the discharge point. There are six emergency/ storm water overflows associated with the existing pumping stations. Three stormwater overflows have holding tanks.

Secondary treatment was required under the Urban Waste Water Treatment Regulations, 2001 (S.I. No. 254 of 2001) (UWW Regulations) by 31/12/05 but such treatment has not, as yet, been provided.

The Cork Harbour Main Drainage Scheme (also referred to as the Cork Lower Harbour Sewerage Scheme) is for the provision of collection systems and waste water treatment facilities in the Cork Lower Harbour area serving the agglomerations of Crosshaven /Carrigaline /Ringaskiddy (D0057-01), Cobh (D0043-01), Passage West /Monkstown (D0129-01) and Ringaskiddy village (D0436-01). It is proposed to construct a new WWTP at Shanbally providing new sewers and secondary treatment with a design capacity of 80,000PE. It is proposed to discharge the treated effluent to Cork Harbour via the existing outfall. The treated trade effluent from five IPPC licensed installations will by-pass the proposed WWTP and discharge without further treatment. An Bord Pleanála granted planning permission to the project in June 2009. Separate planning approval will be required for the construction of pumping stations, holding tanks or outfalls for waste water or storm water associated with the conveyance system and that form part of the Cork Harbour Main Drainage Scheme.

The EIS described indicative designs of the proposed WWTP that aim to meet the quality standards specified in the UWW Regulations.

The licence requires the provision of a secondary waste water treatment plant and appropriate remedial action to be undertaken, within a specified timeframe, in order to address the primary discharge and storm water overflows within the agglomeration.

The licence sets out in detail the conditions under which Cork County Council Southern Division will control and manage the waste water discharges from the agglomeration covered by this licence.

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.

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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.

AER	Annual Environmental Report.
Agglomeration	An area where the population or economic activities or both are sufficiently concentrated for a waste water works to have been put in place.
Agreement	Agreement in writing.
Annually	At least one measurement in any one year.
Application	The application for this licence.
Attachment	Any reference to Attachments in this licence refers to attachments submitted as part of the licence application.
Biannually	All or part of a period of six consecutive months.
Biennially	Once every two years.
BOD	5 day Biochemical Oxygen Demand (without nitrification suppression).
CBOD	5 day Carbonaceous Biochemical Oxygen Demand (with nitrification suppression).
CEN	Comité Européen De Normalisation European Committee for Standardisation.
COD	Chemical Oxygen Demand.
Combined approach	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.
Daily	During all days when discharges are taking place: with at least one measurement per day.
Day	Any 24 hour period.
Discharge limits	Those limits, specified for a particular parameter in <i>Schedule A: Discharges</i> of this licence.
Discharge Point	The point from which a waste water discharge occurs.
DO	Dissolved oxygen.

Documentation	Any report, record, result, data, drawing, proposal, interpretation or other document, in written or electronic form, that is required by this licence.
DoEHLG	Department of the Environment, Heritage and Local Government.
Domestic Waste Water	Waste water from residential settlements and services that originates predominantly from human metabolism and from household activities.
Drawing	Any reference to a drawing or drawing number means a drawing or drawing number contained in the application, unless otherwise specified in this licence.
EMP	Environmental Management Programme.
Environmental damage	As defined in Directive 2004/35/EC.
EPA	Environmental Protection Agency.
Fortnightly	A minimum of 24 times per year, at approximately two week intervals.
GC/MS	Gas chromatography/mass spectroscopy.
ICP	Inductively coupled plasma spectroscopy.
Incident	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.
Industrial waste water	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.
Licencee	Cork County Council Southern Division.
Licensing Regulations	Waste Water Discharge (Authorisation) Regulations 2007 (S.I. No. 684 of 2007).
Local Authority	Cork County Council.
Maintain	Keep in a fit state, including such regular inspection, servicing, calibration and repair as may be necessary to perform its function.
Monthly	A minimum of 12 times per year, at intervals of approximately one month.
National Environmental	As established under the National Environmental Enforcement Network.

**Complaints
Procedure**

Population Equivalent	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 ₅) 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.
Primary Discharge	The discharge with the largest volume being discharged from the waste water works.
Protected Areas	Areas designated as requiring special protection under specific Community legislation for the protection of their surface water and groundwater or for the conservation of habitats and species of European sites directly dependant on water and listed in the register established by the Agency in accordance with Article 8 of the Water Policy Regulations.
PRTR	Pollutant Release and Transfer Register.
Quarterly	All or part of a period of three consecutive months beginning on the first day of January, April, July or October.
Regional Fisheries Board	South Western Regional Fisheries Board.
Sample(s)	Unless the context of this licence indicates to the contrary, the term samples shall include measurements taken by electronic instruments.
Secondary Discharge	A potential, occasional or continuous discharge from the waste water works other than a primary discharge or a storm water overflow.
SSRS	Small Stream Risk Score.
Specified discharges	Those discharges listed in <i>Schedule A: Discharges</i> of this licence.
Standard method	A National, European or internationally recognised procedure (e.g., U.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.F.E.), American Public Health Association, 1015 Fifteenth Street, N.W., Washington DC 20005, USA; or an alternative method as may be agreed by the Agency.
Storm water overflow	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.
The Agency	Environmental Protection Agency.
Waste Water	Domestic waste water or the mixture of domestic waste water with

industrial waste water.

Waste Water Works 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.

Water Services Authority Cork County Council Southern Division.

Weekly During all weeks when discharges are taking place: with at least one measurement in any one week.

WSIP Water Services Investment Programme.

WWTP 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, a submission received from another party and the report of its inspector.

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 County Council Southern Division, County Hall, Carrigrohane Road, Cork**. The licence authorises the discharge of waste water from the waste water works servicing the **Crosshaven-Carrigaline-Ringaskiddy 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

Part II Conditions

Condition 1. Scope

1.1 Statutory Obligations

1.1.1 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.

1.1.2 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.

1.2 The agglomeration is the area outlined in in red on **Drawing No. 03, 04 and 05** of the application. Any reference in this licence to agglomeration shall mean the area thus outlined in red.

1.3 The 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 1.6 of this licence and subject to the conditions of this licence.

1.4 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.

1.5 For the purposes of this licence, the locations of the waste water discharges authorised by this licence are as presented on **Drawing No. 06, 10, 11 and 12 of the application**.

1.6 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.

1.7 Treatment Capacities

1.7.1 **Upon completion of the waste water treatment plant**, 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).

1.7.2 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.

1.7.3 Where the licensee determines, as part of those assessments undertaken in Condition 1.7.1 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.

<i>Reason: To clarify the scope of this licence.</i>
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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 Composite Sampling
- (i) No pH value shall deviate from the specified range.
 - (ii) For eBOD 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 parameters other than pH, flow, eBOD, 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%.
 - (v) **No mass emission limit values for parameters specified in *Schedule A: Discharges* shall be exceeded.**
- 2.1.2 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(s) 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

- 3.6 **The Water Services Authority shall take such measures as are necessary, in so far as it relates to the primary discharge, to ensure that designated shellfish waters comply with the quality standards specified in Schedule 2 of the European Communities (Quality of Shellfish Waters) Regulations, 2006 (S.I. 268 of 2006) as amended.**

Reason: To provide for the protection of the receiving environment by way of control and limitation of discharges to Cork Harbour.

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 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.
- 4.7 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.
- 4.8 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.
- 4.9 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.
- 4.10 **Toxicity**
The acute toxicity of the undiluted final effluent from the primary and secondary discharge point(s) 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.
- 4.11 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 **European Communities Environmental Objectives (Surface Waters) Regulations 2009 (S.I. No. 272 of 2009)** and any other relevant legislation. Such screening shall be repeated at intervals as requested by the Agency thereafter.
- 4.12 **The licensee shall, within twelve months of the date of grant of this licence, investigate the sources of metals detected during monitoring of discharges and take such measures as are necessary to reduce or eliminate these substances in the primary discharge. A report on the investigation and measures identified, including timeframe for implementation, shall be included in the AER.**
- 4.13 Storm water overflows
- 4.13.1 The licensee shall, prior to the date for submission of the second AER (required under Condition 6.11), 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 DoEHG

'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 and secondary discharges. 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 **Upon completion of the waste water treatment plant**, the licensee shall carry out monthly monitoring of the influent stream to the waste water treatment plant for eBOD, COD, Suspended Solids, Total Nitrogen and Total Phosphorus in order to measure the mass loadings and removal efficiencies within the treatment plant.
- 4.17 **Ambient Monitoring**
- The licensee shall report annually in the AER on the chemical and ecological status of the receiving water. The licensee shall, as a minimum, have regard to the European Communities Environmental Objectives (Surface Waters) Regulations 2009 (S.I. No. 272 of 2009) and the Quality of Shellfish Water Regulations, 2006 (S.I. 268 of 2006) and amendment(s) 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 timing, nature and extent of the report and the appropriate format for submittal.

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:
- achieve improvements in the quality of all discharges from the works;
 - meet the emission limit values specified in *Schedule A: Discharges*, of this licence;
 - give effect to Regulation 2 of the Waste Water Discharge (Authorisation) Regulations 2007 (S.I. No. 684 of 2007);

- d) reduce Total Nitrogen loadings **and priority substances** in the discharge to the maximum practicable extent;
 - e) **cease emissions, discharges or losses of priority hazardous substances;**
 - f) meet the obligations of Condition 1.7.
- 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) water quality objective for the receiving water body;
 - (v) 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;
 - (ii) leaks from the waste water works;
 - (iii) infiltration by surface water;
 - (iv) infiltration by groundwater;
 - (v) such other aspects of the works as may be specified by the Agency.
 - c) 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.
 - d) **the standards and volumetric limitations applied to any industrial waste water that is licensed to discharge to the waste water works.**
- 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) (storm water overflows) **and 5.2(d) (industrial discharge licences):**
 - (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 **01/01/2015** 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 a review of the hydrodynamic and modelling report, Appendix 3A of the Environmental Impact Statement that accompanied the licence application in consultation with the DoEHLG, the Sea Fisheries Protection Authority, the Marine Institute and Bord Iascaigh Mhara. The review assessment shall have particular reference to 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. The report on the review assessment shall be submitted to the Agency within eighteen months of the date of grant of the licence.**
- 5.7 **Where the review assessment outlined 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 which may include the installation of a UV disinfection system or other appropriate measure.**

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 the **Department of Agriculture, Fisheries and Food**, as soon as practicable after such an incident.
- 6.3 **In the case of any incident relating to a discharge to a designated shellfish water, the licensee shall notify the Marine Institute (MI), Sea Fisheries Protection Authority (SFPA), Food Safety Authority (FSAI) and an Bord Iascaigh Mhara (BIM) 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 discharge(s) 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(s) relating to the discharge(s) to waters from the waste water works;
 - (iii) the previous year's AFR;
 - (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 (OLE) 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 28th 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.

Reason: To provide for the collection and reporting of adequate information on the activity.

Condition 7. Financial Charges and Provisions

7.1 Agency Charges

- 7.1.1 The licensee shall pay to the Agency an annual contribution of **€4,304**, 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 31st 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

1.1 Primary Waste Water Discharge

Primary Discharge Point Code: SW01RING (181358E, 062521N)
 Name of Receiving Waters: Cork Harbour (SW 0600 0000)
 Location of monitoring point: 178874E 063432N

Parameter	Emission Limit Value	
	mg/l	kg/day
pH	6 - 9	
Toxic units	10	
CBOD	25	--
COD	125	--
Suspended Solids	35	--
Total Nitrogen	28.5	424



1.2 Secondary Waste Water Discharges

There shall be no Secondary Waste Water Discharges.



1.3 Discharges to be discontinued

No discharge is required to be discontinued in this schedule.



1.4 Storm Water Overflows

Discharge Point Code <small>Note 1</small>	Location	Name of Receiving Waters
SW02RING	175796E 064930N	Monkstown Creek, Cork Harbour (SW 0600 0000)
SW03RING	174443E 062603N	Owenboy River (SW 060 1200)
SW04RING	173131E 062418N	Owenboy River (SW 060 1200)
SW05RING	173070E 062352N	Owenboy River (SW 060 1200)
SW06RING	178816E 061285N	Owenboy River (SW 060 1200)
SW07RING	179639E 061145N	Owenboy River (SW 060 1200)

Note 1: This discharge shall comply with the definition of a storm water overflow as set out in "Procedures and Criteria in relation to Storm Water Overflows".



SCHEDULE B: Monitoring

B.1 Monitoring of Primary Waste Water Discharge

Primary Discharge Point Code:	SW01RING	
Parameter	Monitoring Frequency	Analysis Method/Technique
Flow	Continuous Daily ^{Note 1 & 2}	On-line flow meter with recorder
pH	Daily ^{Note 1 & 3}	pH electrode/meter and recorder
Carbonaceous Biochemical Oxygen Demand	Fortnightly ^{Note 1 & 2}	Standard Method
Chemical Oxygen Demand	Fortnightly ^{Note 1 & 3}	Standard Method
Suspended Solids	Fortnightly ^{Note 1 & 3}	Standard Method
Total Nitrogen (as N)	Fortnightly ^{Note 1 & 3}	Standard Method
Total Oxidised Nitrogen	Fortnightly ^{Note 1 & 3}	Standard Method
Total Ammonia	Fortnightly ^{Note 1 & 3}	Standard Method
Total Phosphorus (as P)	Fortnightly ^{Note 1 & 3}	Standard Method
Orthophosphate (as P)	Fortnightly ^{Note 1 & 3}	Standard Method
Metals and Organic Compounds ^{Note 4}	As required	Standard Method
Mercury	Biannual ^{Note 3}	Standard Method
Copper	Biannual ^{Note 3}	Standard Method
Chromium	Biannual ^{Note 3}	Standard Method
Lead	Biannual ^{Note 3}	Standard Method
Zinc	Biannual ^{Note 3}	Standard Method
di-n-butylphthalate	Biannual ^{Note 3}	Standard Method
PCB 28 and 118	Biannual ^{Note 3}	Standard Method
Toxicity ^{Note 5}	Annual ^{Note 1 & 3}	To be agreed by the Agency
Visual Inspection	Daily ^{Note 1}	Sample and examine for colour and odour

Note 1: Monitoring will commence on 1st January 2015 or upon completion of the wastewater treatment plant, whichever ever is the sooner.

Note 2: Total effluent volume discharged over the 24-hour period in which the composite sample is collected shall be recorded.

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

Note 4: Having identified the most relevant pollutants from screening (Condition 4.11), subsequent monitoring for these pollutants shall be carried out at a frequency agreed by the Agency.

Note 5: The number of toxic units (TU) = 100 x hour B.C.T.C. as a percentage of 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 waste water discharges is required in this licence.

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

No of samples taken in any one year ^{Note 1}	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

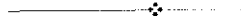
Note 1: Where the licensee has taken samples which exceed the number specified in this Schedule the licensee shall submit to the Agency all results of analysis



B.4 Ambient Monitoring

Receiving Water Monitoring

See Condition 4.17 for requirements.



SCHEDULE C: Specified Improvement Programme

C.1 Improvement Programme for Primary Discharge

Specified Improvement	Completion Date
Waste water treatment plant and ancillary works which provide for secondary treatment.	1 st January 2015
Installation of rising mains, gravity sewers, pumping stations and a marine pipeline crossing including upgrading of existing facilities.	1 st January 2015
Infiltration programme.	1 st January 2015
Any other works notified in writing by the Agency	As agreed



C.2 Improvement Programme for Secondary Discharge(s)

No improvements works are specified.



C.3 Improvement Programme for Storm Water Overflows

Discharge Point Code	Location	Specified Improvement	Completion Date
SW02RING	175796E 064930N	Meet requirements of DoE/H.I.G. Procedures and Criteria in Relation to Storm Water Overflows, 1995	1st January 2015
SW03RING	174443E 062603N		
SW04RING	173131E 062418N		
SW05RING	173070E 062352N		
SW06RING	178816E 061285N		
SW07RING	179639E 061145N		
Any other overflows notified in writing by the Agency			As agreed



SCHEDULE D: Annual Environmental Report

Annual Environmental Report Content ^{Note 1}

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.

Report on ambient water quality of Cork Harbour.

Storm water overflow identification and inspection report.

Reported incidents summary.

Report on the investigation and measures identified under Condition 4.12.

Report on progress made and proposals being developed to meet the improvement programme requirements. ^{Note 2}

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 timelimes set out in this licence.