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Environmental Protection Agency,  
Office of Climate change and resource Unit,  
Licencing Unit ,  
P.O.Box 3000,  
Johnstown Castle Estate,  
County Wexford.

Our Ref.: MS/COA/0609

15<sup>th</sup> June 2009

Sub.: Waste Water Discharge License Application for the Agglomeration of Coachford , County Cork.

Dear Sir/Madam,

Please find enclosed the waste water discharge license application for the agglomeration of Coachford .

The following are the documents enclosed as per the application guide note.

- 1 No. signed hard copies of Originals.
- 1 No. hard copy of Originals.
- 2 No. CD-ROM with documentation in electronic searchable PDF,
- 1 No. CD-ROM with GIS Data, Table D.2 ,Table E.3.and Table F.2

The content of the electronic files is true copy of the original hard copy.

Yours faithfully,

Patricia Power

Director of Services





# Waste Water Discharge Licence Application Form

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|  |                      |
|--|----------------------|
| <b>EPA Ref. N<sup>o</sup>:</b><br><i>(Office use only)</i> | <input type="text"/> |
|--|----------------------|

**Environmental Protection Agency**  
PO Box 3000, Johnstown Castle Estate, Co. Wexford  
Lo Call: 1890 335599 Telephone: 053-9160600 Fax: 053-9160699  
Web: [www.epa.ie](http://www.epa.ie) Email: info@epa.ie

**Tracking Amendments to Draft Application Form**

| Version No. | Date     | Amendment since previous version  | Reason   |
|-------------|----------|---|--|
| V. 1.       | 11/10/07 | N/A   |  |
| V. 2.       | 18/10/07 | Inclusion of a Note 1 superscript for Orthophosphate in Tables D.1(i)(b) & D.1(ii)(b).  | To highlight the requirement for filtered samples in measurement of O-Phosphate for waste water discharges.  |
| V.3.        | 13/11/07 | Amend wording of Section F.2 to include 'abstraction'.<br><br>Amend wording of Checklist in Annex to reflect wording of Regulation 16(5) of S.I. No. 684 of 2007.<br><br>Inclusion of unique point code for each point of discharge and storm water overflow.   | To accurately reflect the information required<br><br>To accurately reflect the Regulations and to obtain the application documentation in appropriate format.<br><br>To aid in cross-referencing of application documentation.  |
| V.4         | 18/04/08 | Inclusion of requirement to provide name of agglomeration to which the application relates.<br><br>Amend wording of Section B.7. (iii) to reflect the title of Water Services Authority.<br><br>Addition of new Section B.9 (ii) in order to obtain information on developments yet to contribute to the waste water works.<br><br>Addition of sub-sections C.1.1 & C.1.2 in order to clarify information required for Storm water overflow and pumping stations within the works.<br><br>Amend Section D.1 to include a requirement for monitoring data for influent | To accurately determine the agglomeration to be licensed.<br><br>To accurately reflect the Water Services Act, 2007.<br><br>To obtain accurate population equivalent figures for the agglomeration.<br><br>To obtain accurate information on design and spill frequency from these structures.<br><br>To acquire information on the population loading onto the plant and to provide information on performance rates within |

## Waste Water Discharge Authorisation Application Form

|     |            |   |  |
|-----|------------|---|--|
|     |            | to waste water treatment plants, where available.<br>Amend wording of Section E.1 to request information on composite sampling/flow monitoring provisions.  | the plant.<br>To acquire accurate information on the sampling and monitoring provisions for discharges from the works.   |
| V.5 | 07/07/2008 | Amend wording of B.7 (iii) to include reference to Water Services Authorities.<br><br>Amend Section G.1 to include Shellfish Waters Directive.  | To accurately reflect the Water Services Act, 2007 requirements.   |
| V.6 | 26/08/2008 | Amendments to Section D to reflect new web based reporting.<br><br>Amended requirements for reporting on discharges under E.1 Waste Water Discharge Frequency and Quantities.<br><br>Amendment to Section F.1 to specify the type of monitoring and reporting required for the background environment.<br><br>Removal of Annexes to application form. | To clarify the reporting requirements.<br><br>To streamline reporting requirements.<br><br>To clarify the reporting requirements for ambient monitoring.<br><br>To reflect the new web based reporting requirements. |

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## Waste Water Discharge Authorisation Application Form

# Environmental Protection Agency Application for a Waste Water Discharge Licence Waste Water Discharge (Authorisation) Regulations 2007.

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## ABOUT THIS APPLICATION FORM

This form is for the purpose of making an application for a Waste Water Discharge Licence under the Waste Water Discharge (Authorisation) Regulations, 2007 (S.I. No. 684 of 2007) or for the review of an existing Waste Water Discharge licence.

The Application Form **must** be completed in accordance with the instructions and guidance provided in the *Waste Water Discharge Licensing Application Guidance Note*. The Guidance Note gives an overview of Waste Water Licensing, outlines the licence application process (including the number of copies required) and specifies the information to be submitted as part of the application. The Guidance Note and application form are available to download from the Licensing page of the EPA's website at [www.epa.ie](http://www.epa.ie).

A valid application for a Waste Water Discharge Licence must contain the information prescribed in the Waste Water Discharge (Authorisation) Regulations, 2007 (S.I. No. 684 of 2007). Regulation 16 of the Regulations sets out the statutory requirements for information to accompany a licence application. The application form is designed in such a way as to set out these questions in a structured manner and not necessarily in the order presented in the Regulations. In order to ensure a legally valid application in respect of Regulation 16 requirements, please complete the Regulation 16 Checklist provided in Annex 2.

This Application Form does not purport to be and should not be considered a legal interpretation of the provisions and requirements of the Waste Water Discharge (Authorisation) Regulations, 2007. While every effort has been made to ensure the accuracy of the material contained in the Application Form, the EPA assumes no responsibility and gives no guarantee, or warranty concerning the accuracy, completeness or up-to-date nature of the information provided herein and does not accept any liability whatsoever arising from any errors or omissions.

Should there be any contradiction between the information requirements set out in the Application Form and any clarifying explanation contained in the accompanying Guidance Note, then the requirements in this Application Form shall take precedence.

## PROCEDURES

The procedure for making and processing of applications for waste water discharge licences, and for the processing of reviews of such licences, appear in the Waste Water Discharge (Authorisation) Regulations, 2007 (S.I. No. 684 of 2007) and is summarised below. The application fees that shall accompany an application are listed in the Third Schedule to the Regulations.

Prior to submitting an application the applicant must publish in a newspaper circulating in the area, and erect at the point nearest to the waste water treatment plant concerned or, if no such plant exists, at a location nearest the primary discharge point, a notice of intention to apply. An applicant, not being the local authority in whose functional area the relevant waste water discharge, or discharges, to which the relevant application relates, takes place or is to take place, must also notify the relevant Local Authority, in writing, of their intention to apply.

An application for a licence must be submitted on the appropriate form (available from the Agency) with the correct fee, and should contain relevant supporting documentation as attachments. The application should be based on responses to the form and include supporting written text and the appropriate use of tables and drawings. Where point source emissions occur, a system of unique reference numbers should be used to denote each discharge point. These should be simple, logical, and traceable throughout the application.

The application form is divided into a number of sections of related information. The purpose of these divisions is to facilitate both the applicant and the Agency in the provision of the information and its assessment. **Please adhere to the format as set out in the application form and clearly number each section and associated attachment, if applicable, accordingly.** Attachments should be clearly numbered, titled and paginated and must contain the required information as set out in the application form. Additional attachments may be included to supply any further information supporting the application. Any references made should be supported by a bibliography.

**All questions should be answered. Where information is requested in the application form, which is not relevant to the particular application, the words "not applicable" should be clearly written on the form. The abbreviation "N/A" should not be used.**

Additional information may need to be submitted beyond that which is explicitly requested on this form. Any references made should be supported by a bibliography. The Agency may request further information if it considers that its provision is material to the assessment of the application. Advice should be sought from the Agency where there is doubt about the type of information required or the level of detail.

Information supplied in this application, including supporting documentation will be put on public display and be open to inspection by any person.

Applicants should be aware that a contravention of the conditions of a waste water discharge licence is an offence under the Waste Water Discharge (Authorisation) Regulations, 2007.



**The provision of information in an application for a waste water discharge licence which is false or misleading is an offence under Regulation 35 of the Waste Water Discharge (Authorisation) Regulations, 2007 (S.I. No. 684 of 2007).**

*Note: Drawings. The following guidelines are included to assist applicants:*

- *All drawings submitted should be titled and dated.*
- *All drawings should have a unique reference number and should be signed by a clearly identifiable person.*
- *All drawings should indicate a scale and the direction of north.*
- *All drawings should, generally, be to a scale of between 1:20 to 1:500, depending upon the degree of detail needed to be shown and the size of the facility. Drawings delineating the boundary can be to a smaller scale of between 1:1000 to 1:10560, but must clearly and accurately present the required level of detail. Drawings showing the waste water treatment plant location, if such a plant exists, can be to a scale of between 1:50 000 to 1:126 720. All drawings should, however, be A3 or less and of an appropriate scale such that they are clearly legible. Provide legends on all drawings and maps as appropriate.*
- *In exceptional circumstances, where A3 is considered inadequate, a larger size may be requested by the Agency.*

**It should be noted that it will not be possible to process or determine the application until the required documents have been provided in sufficient detail and to a satisfactory standard.**

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## SECTION A: NON-TECHNICAL SUMMARY

*Advice on completing this section is provided in the accompanying Guidance Note.*

A non-technical summary of the application is to be included here. The summary should identify all environmental impacts of significance associated with the discharge of waste water associated with the waste water works. This description should also indicate the hours during which the waste water works is supervised or manned and days per week of this supervision.

The following information must be included in the non-technical summary:

A description of:

- the waste water works and the activities carried out therein,
- the sources of emissions from the waste water works,
- the nature and quantities of foreseeable emissions from the waste water works into the receiving aqueous environment as well as identification of significant effects of the emissions on the environment,
- the proposed technology and other techniques for preventing or, where this is not possible, reducing emissions from the waste water works,
- further measures planned to comply with the general principle of the basic obligations of the operator, i.e., that no significant pollution is caused;
- measures planned to monitor emissions into the environment.

Supporting information should form **Attachment N° A.1**

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## SECTION A: NON-TECHNICAL SUMMARY

### The Waste Water Works and the Activities Carried Out Therein

Coachford is a village approximately 15 miles from Cork City and 9 miles from Macroom. It is located North of the River Lee on the R618.

The waste water in Coachford village is collected in a partially separated foul sewerage collection system, consisting of approximately 3050 lin.m. of pipework. The waste water collection system primarily serves Fr. Sheehan Place, some long established houses and the primary and secondary schools which are the most significant non-domestic discharge.

The septic tank is located in the townland of Clontead Beg within the Cork County Council storage yard. The septic tank was constructed in the 1950's. The septic tank provides primary treatment which discharges into the River Lee.

In order to assess the design capacity (design Population) of the septic tank the following calculation was used:

$C = 180P + 2000$  where C is the capacity of the tank (in litres) and P is the design population. Using this formula the septic tank can sufficiently cater for a population of 402 persons. It should be noted that this formula was obtained from BS6297:1983, this standard has been superseded in 2007 (BS6294:2007) however the new standard does not give any formulae for assessing the capacity of septic tanks. So for the basis of this application BS6297:1983 is used.

The septic tank provides primary settlement only, which according to the National Urban Waste Water Study (NUWWS) reduces the BOD load by approximately 30% and the Suspended Solids load by approximately 50%.

The actual PE currently entering the existing treatment plant is approximately 726. This is based on a Scoping Study carried out on behalf of Cork County Council in 2005. Domestic figures were based on a combination of data from the 2002 census and a house count. Non-domestic loadings were calculated by identifying the non-domestic premises and basing loadings on figures given in the EPA Wastewater Treatment Manual - Treatment Systems for Small Communities, Business, Leisure Centres and Hotels. It is unlikely that there has been any significant change in these figures since 2005.

For the purposes of this application the relevant PE chosen for the licence period is 990, being the PE estimated at the end of that period.

The waste water enters the septic tank via 2 no. gravity sewers, both 225mm diameter. A storm overflow located approximately 57m west of the entrance to the plant consists of 2 no. 225mm pipes which discharge to an open drain in periods of heavy rain.

At present the effluent enters the plant by gravity from 2 separate directions. The effluent combines in the inlet channel and then separates into 2 concrete channels and enters the septic tank. There are 2 chambers within the septic tank of equal size. The treated effluent discharges from each chamber of the septic tank into an open channel.

The open channel discharges into a closed outfall pipe of diameter 225mm. The treated effluent flows from the open channel to the outfall, a distance of approximately 1.4km. The treated effluent discharges to the River Lee in the

townland of Nadrid. This area was flooded in 1957 as part of the River Lee Hydro-electricity Scheme and the outfall pipe is no longer visible.

It is proposed to provide a new treatment plant in Coachford as a Serviced Land Initiative under the Water Services Investment Programme to cater for existing and future increased loads. A number of suitable sites have been identified. The scheme was approved by the DoEHLG in November 2007. Approval for all SLI schemes was withdrawn by the DoEHLG as per Circular L3/09 issued in April 2009. Cork County Council subsequently wrote to the DoEHLG in May 2009 seeking approval to continue to progress this scheme as an SLI. Cork County Council is awaiting a response from the DoEHLG relating to this request.

The WWTP is inspected monthly by the Area Supervisor and is desludged quarterly. Sludge is disposed of in accordance with the relevant Sludge Regulations.

### **The sources of emissions from the waste water works**

The pollution load for the Coachford agglomeration arises from the following areas:

- Domestic population
- Commercial and non-domestic users including 2 no. schools
- Infiltration and storm water

The pollution load from these sources varies with daily, weekly and seasonal producers of effluent.

The sewage from all commercial activities is collected via the public sewer and treated in conjunction with the domestic waste at the septic tank.

### **The nature and quantities of foreseeable emissions from the waste water works into the receiving aqueous environment as well as identification of significant effects of the emissions on the environment**

The capacity of the septic tank is approximately 402PE. At design capacity the plant would discharge 72m<sup>3</sup>/day (DWF) to the River Lee based on 180l/head/day.

The actual discharges to the River Lee based on the estimated loadings to the plant of 726PE is 131m<sup>3</sup>/day. The average BOD loading is estimated at 43.56kg/day.

The main function of the existing septic tank is to act as a primary settlement tank removing some of the BOD and the majority of the suspended solids.

### **The proposed technology and other techniques for preventing or, where this is not possible, reducing emissions from the waste water works**

The complete process will likely be upgraded in the future with the provision of a new WWTP. This, however, is subject to reapproval of the SLI scheme by the Department of Environment. New technologies and techniques for reducing/preventing emissions from the waste water works treatment capacity will be implemented at that stage.

**Further measures planned to comply with the general principle of the basic obligations of the operator i.e. that no significant pollution is caused.**

The complete process will likely be upgraded in the future with the provision of a new WWTP. This, however, is subject to Department of Environment funding. The treatment capacity, discharge quality and control systems will be improved at this stage to ensure that no significant pollution is caused.

**Measures planned to monitor emissions into the environment**

The Cork County Council Environmental Laboratory carries out sampling of the effluent from the septic tank. In 2008 sampling was carried out 6 times.

The Environmental Laboratory also takes samples from the River Lee upstream and downstream of the discharge point in accordance with the Salmonid Regulations.

List of Attachments include the following:

- General Site Layout 1
- General Site Layout 2

Attachment A1 Map 1  
Attachment A1 Map 2

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|                           |
|---------------------------|
| <b>SECTION B: GENERAL</b> |
|---------------------------|

Advice on completing this section is provided in the accompanying Guidance Note.

### B.1 Agglomeration Details

|   |
|---|
| <b>Name of Agglomeration:</b> Coachford Agglomeration |
|---|

#### Applicant's Details

##### Name and Address for Correspondence

Only application documentation submitted by the applicant and by the nominated person will be deemed to have come from the applicant.

Provide a drawing detailing the agglomeration to which the licence application relates. It should have the boundary of the agglomeration to which the licence application relates clearly marked in red ink.

|                 |                            |
|-----------------|----------------------------|
| <b>Name*:</b>   | Cork County Council        |
| <b>Address:</b> | Southern Division          |
|                 | County Hall                |
|                 | Carrigrohane Road          |
|                 | Co. Cork                   |
| <b>Tel:</b>     | 021 427 6891               |
| <b>Fax:</b>     | 021 427 6321               |
| <b>e-mail:</b>  | patricia.power@corkcoco.ie |

\*This should be the name of the water services authority in whose ownership or control the waste water works is vested.

\*Where an application is being submitted on behalf of more than one water services authority the details provided in Section B.1 shall be that of the lead water services authority.

|                 |                            |
|-----------------|----------------------------|
| <b>Name*:</b>   | Patricia Power             |
| <b>Address:</b> | Area Operations South      |
|                 | County Hall                |
|                 | Carrigrohane Road          |
|                 | Cork                       |
| <b>Tel:</b>     | 021 4285 285               |
| <b>Fax:</b>     | 021 4276 321               |
| <b>e-mail:</b>  | patricia.power@corkcoco.ie |

\*This should be the name of person nominated by the water services authority for the purposes of the application.

#### Co-Applicant's Details

|                 |                |
|-----------------|----------------|
| <b>Name*:</b>   | Not Applicable |
| <b>Address:</b> | Not Applicable |
|                 |                |
|                 |                |
| <b>Tel:</b>     | Not Applicable |
| <b>Fax:</b>     | Not Applicable |
| <b>e-mail:</b>  | Not Applicable |

\*This should be the name of a water services authority, other than the lead authority, where multiple authorities are the subject of a waste water discharge (authorisation) licence application.

## Design, Build & Operate Contractor Details

|                 |                |
|-----------------|----------------|
| <b>Name*:</b>   | Not Applicable |
| <b>Address:</b> | Not Applicable |
|                 |                |
|                 |                |
| <b>Tel:</b>     | Not Applicable |
| <b>Fax:</b>     | Not Applicable |
| <b>e-mail:</b>  | Not Applicable |

\*Where a design, build & operate contract is in place for the waste water works, or any part thereof, the details of the contractor should be provided.

**Attachment B.1** should contain appropriately scaled drawings / maps ( $\leq A3$ ) of the agglomeration served by the waste water works showing the boundary clearly marked in red ink. These drawings / maps should also be provided as geo-referenced digital drawing files (e.g., ESRI Shapefile, MapInfo Tab, AutoCAD or other upon agreement) in Irish National Grid Projection. These drawings should be provided to the Agency on a separate CD-Rom containing sections B.2, B.3, B.4, B.5, C.1, D.2, E.3 and F.2.

| Attachment included | Yes | No |
|---------------------|-----|----|
|                     | √   |    |

## B.2 Location of Associated Waste Water Treatment Plant(s)

Give the location of the waste water treatment plant associated with the waste water works, if such a plant or plants exists.

|                           |   |
|---------------------------|---|
| <b>Name*:</b>             | Noreen O'Mahony                             |
| <b>Address:</b>           | Cork County Council                         |
|                           | Ballincollig/ Blarney Water Services Office |
|                           | Innishmore                                  |
|                           | Ballincollig                                |
|                           | Co.Cork.                                    |
| <b>Grid ref (6E, 6N)</b>  | 146003E, 073146N (entrance)                 |
| <b>Level of Treatment</b> | Primary                                     |
| <b>Primary Telephone:</b> | 021 487 5643                                |
| <b>Fax:</b>               | 021 428 9868                                |
| <b>e-mail:</b>            | noreen.omahony@corkcoco.ie                  |

\*This should be the name of the person responsible for the supervision of the waste water treatment plant.

**Attachment B.2** should contain appropriately scaled drawings / maps ( $\leq A3$ ) of the site boundary and overall site plan, including labelled discharge, monitoring and sampling points. These drawings / maps should also be provided as geo-referenced digital drawing files (e.g., ESRI Shapefile, MapInfo Tab, AutoCAD or other upon agreement) in Irish National Grid Projection. These drawings should be provided to the Agency on a separate CD-Rom containing sections B.1, B.3, B.4, B.5, C.1, D.2, E.3 and F.2.

| Attachment included | Yes | No |
|---------------------|-----|----|
|                     | √   |    |

### B.3 Location of Primary Discharge Point

Give the location of the primary discharge point, as defined in the Waste Water Discharge (Authorisation) Regulation, associated with the waste water works.

|                          |   |
|--------------------------|---|
| <b>Type of Discharge</b> | 225mm diameter outfall pipe from the septic tank to the discharge point in the River Lee in the townland of Nadrid, a distance of approximately 1.4km from the septic tank. |
| <b>Unique Point Code</b> | SW01 – Coachford  |
| <b>Location</b>          | River Lee, Nadrid   |
| <b>Grid ref (6E, 6N)</b> | 145231E, 072297N  |

**Attachment B.3** should contain appropriately scaled drawings / maps ( $\leq A3$ ) of the discharge point, including labelled monitoring and sampling points associated with the discharge point. These drawings / maps should also be provided as geo-referenced digital drawing files (e.g. ESRI Shapefile, MapInfo Tab, AutoCAD or other upon agreement) in Irish National Grid Projection. This data should be provided to the Agency on a separate CD-Rom containing the drawings and tabular data requested in sections B.1, B.2, B.4, B.5, C.1, D.2, E.3 and F.2.

| Attachment included | Yes | No |
|---------------------|-----|----|
|                     | √   |    |

### B.4 Location of Secondary Discharge Point(s)

Give the location of **all** secondary discharge point(s) associated with the waste water works. Please refer to Guidance Note for information on Secondary discharge points.

|                          |                |
|--------------------------|----------------|
| <b>Type of Discharge</b> | Not Applicable |
| <b>Unique Point Code</b> | Not Applicable |
| <b>Location</b>          | Not Applicable |
| <b>Grid ref (6E, 6N)</b> | Not Applicable |

**Attachment B.4** should contain appropriately scaled drawings / maps ( $\leq A3$ ) of the discharge point(s), including labelled monitoring and sampling points associated with the discharge point(s). These drawings / maps should also be provided as geo-referenced digital drawing files (e.g. ESRI Shapefile, MapInfo Tab, AutoCAD or other upon agreement) in Irish National Grid Projection. This data should be provided to the Agency on a separate CD-Rom containing sections B.1, B.2, B.3, B.5, C.1, D.2, E.3 and F.2.

| Attachment included | Yes | No |
|---------------------|-----|----|
|                     |     |    |



|  |  |   |
|--|--|---|
|  |  | √ |
|--|--|---|

### B.5 Location of Storm Water Overflow Point(s)

Give the location of **all** storm water overflow point(s) associated with the waste water works.

|                          |                         |
|--------------------------|-------------------------|
| <b>Type of Discharge</b> | 225mm overflow pipe     |
| <b>Unique Point Code</b> | SW02 – Coachford        |
| <b>Location</b>          | Clontead Beg, Coachford |
| <b>Grid ref (6E, 6N)</b> | 145955E, 073162N        |

|                          |                         |
|--------------------------|-------------------------|
| <b>Type of Discharge</b> | 225mm overflow pipe     |
| <b>Unique Point Code</b> | SW03 – Coachford        |
| <b>Location</b>          | Clontead Beg, Coachford |
| <b>Grid ref (6E, 6N)</b> | 145947E, 073165N        |

**Attachment B.5** should contain appropriately scaled drawings / maps ( $\leq A3$ ) of storm water overflow point(s) associated with the waste water works, including labelled monitoring and sampling points associated with the discharge point(s). These drawings / maps should also be provided as geo-referenced digital drawing files (e.g. ESRI Shapefile, MapInfo Tab, AutoCAD or other upon agreement) in Irish National Grid Projection. This data should be provided to the Agency on a separate CD-Rom containing sections B.1, B.2, B.3, B.4, C.1, D.2, E.3 and F.2.

| Attachment included | Yes | No |
|---------------------|-----|----|
|                     | √   |    |

### B.6 Planning Authority

Give the name of the planning authority, or authorities, in whose functional area the discharge or discharges take place or are proposed to take place.

|                 |  |
|-----------------|--|
| <b>Name:</b>    | Cork County Council  |
| <b>Address:</b> | Planning Department  |
|                 | County Hall  |
|                 | Carrigrohane Road  |
|                 | Cork   |
| <b>Tel:</b>     | 021 427 6891   |
| <b>Fax:</b>     | 021 486 7007   |
| <b>e-mail:</b>  | <a href="mailto:planninginfo@corkcoco.ie">planninginfo@corkcoco.ie</a> |

Planning Permission relating to the waste water works which is the subject of this application:- (tick as appropriate)

|                               |   |                           |  |
|-------------------------------|---|---------------------------|--|
| <b>has been obtained</b>      |   | <b>is being processed</b> |  |
| <b>is not yet applied for</b> | √ | <b>is not required</b>    |  |

|   |                |
|---|----------------|
| <b>Local Authority Planning File Reference N<sup>o</sup>:</b> | Not Applicable |
|---|----------------|

**Attachment B.6** should contain **the most recent** planning permission, including a copy of **all** conditions, and where an EIS was required, copies of any such EIS and any certification associated with the EIS, should also be enclosed. Where planning permission is not required for the development, provide reasons, relevant correspondence, etc.

| <b>Attachment included</b> | <b>Yes</b> | <b>No</b> |
|----------------------------|------------|-----------|
|                            |            | √         |

### B.7 Other Authorities

B.7 (i) Shannon Free Airport Development Company (SFADCo.) area

The applicant should tick the appropriate box below to identify whether the discharge or discharges are located within the Shannon Free Airport Development Company (SFADCo.) area.

**Attachment B.7(i)** should contain details of any or all discharges located within the SFADCo. area.

| <b>Within the SFADCo Area</b> | <b>Yes</b> | <b>No</b> |
|-------------------------------|------------|-----------|
|                               |            | √         |

B.7 (ii) Health Services Executive Region

The applicant should indicate the **Health Services Executive Region** where the discharge or discharges are or will be located.

|                |                                |
|----------------|--------------------------------|
| <b>Name:</b>   | Health Service Executive South |
|                | Áras Sláinte                   |
|                | Wilton Road, Cork              |
| <b>Tel:</b>    | 021 4545011                    |
| <b>Fax:</b>    | 021 4927228                    |
| <b>e-mail:</b> | Not Available                  |

B.7 (iii) Other Relevant Water Services Authorities

Regulation 13 of the Waste Water Discharge (Authorisation) Regulations, 2007 requires all applicants, not being the water services authority in whose functional area the relevant waste water discharge or discharges, to which the relevant application relates, takes place or is to take place, to notify the relevant water services authority of the said application.

|                 |                |
|-----------------|----------------|
| <b>Name:</b>    | Not Applicable |
| <b>Address:</b> | Not Applicable |
|                 |                |

|                |                |
|----------------|----------------|
| <b>Tel:</b>    | Not Applicable |
| <b>Fax:</b>    | Not Applicable |
| <b>e-mail:</b> | Not Applicable |

|                                    |            |           |
|------------------------------------|------------|-----------|
| <b>Relevant Authority Notified</b> | <b>Yes</b> | <b>No</b> |
|                                    |            | √         |

**Attachment B.7(iii)** should contain a copy of the notice issued to the relevant local authority.

|                            |            |           |
|----------------------------|------------|-----------|
| <b>Attachment included</b> | <b>Yes</b> | <b>No</b> |
|                            |            | √         |

### B.8 Notices and Advertisements

Regulations 10 and 11 of the Waste Water Discharge (Authorisation) Regulations, 2007 require all applicants to advertise the application in a newspaper and by way of a site notice. See *Guidance Note*.

**Attachment B.8** should contain a copy of the site notice and an appropriately scaled drawing ( $\leq A3$ ) showing its location. **The original application must include the original page of the newspaper in which the advertisement was placed.** The relevant page of the newspaper containing the advertisement should be included with the original and two copies of the application.

|                            |            |           |
|----------------------------|------------|-----------|
| <b>Attachment included</b> | <b>Yes</b> | <b>No</b> |
|                            | √          |           |

### B.9 (i) Population Equivalent of Agglomeration

**TABLE B.9.1 POPULATION EQUIVALENT OF AGGLOMERATION**

The population equivalent (p.e.) of the agglomeration to be, or being, served by the waste water works should be provided and the period in which the population equivalent data was compiled should be indicated.

|                              |                                 |
|------------------------------|---------------------------------|
| <b>Population Equivalent</b> | 726 (current)<br>990 (Proposed) |
| <b>Data Compiled (Year)</b>  | 2005                            |
| <b>Method</b>                | Census Data / House Count       |

### B.9 (ii) Pending Development

Where planning permission has been granted for development(s), but development has not been commenced or completed to date, within the boundary of the agglomeration and this development is being, or is to be, served by the waste water works provide the following information;

- information on the calculated population equivalent (p.e.) to be contributed to the waste water works as a result of those planning permissions granted,

- the percentage of the projected p.e. to be contributed by the non-domestic activities, and
- the ability of the waste water works to accommodate this extra hydraulic and organic loading without posing an environmental risk to the receiving water habitat.

The current population equivalent being treated at Coachford WWTP is approx 726. This is based on 2002 Census data and a house count undertaken in 2005. An allowance was made for the non domestic element in particular the schools. 38% of the total load is estimated as being from the non-domestic element.

The agglomeration includes all lands currently served by the sewer in the village and all lands where planning permission has been granted but development has not commenced or completed to date.

It should be noted that the catchment area of the existing network exceeds the current proposed zoned development areas. These sections of the existing network, for the most part, serve ribbon development. However long sections of existing undeveloped lands within the catchment area would not be suitable for large residential development as they are at a much lower level than the existing networks in the main road. These areas are north of the R618 westwards to Macroom and south of the R618 eastwards to Cork.

Planning permission was granted in 2008 for 79 no. dwellings in Glebe and for 26 no. dwellings in Knockaneowen. Both planning permissions were granted with the condition that no house is occupied until such time as the new WWTP and other services are commissioned. Construction work has commenced on both sites. No other significant planning permissions have been granted in recent times. Housing development since the 2002 Census has been ribbon development or single houses only.

The 2005 Scoping Study for the new WWTP projects a PE of 1208 in 2011. This would consist of 33% non-domestic loading. It is unlikely that this target will be reached by 2011 given the current economic climate and the lack of development in Coachford in recent years.

It is proposed to provide a new treatment plant in Coachford as a Serviced Land Initiative under the Water Services Investment Programme to cater for existing and future increased loads. The Department of Environment previously approved funding for this scheme. However the scheme has recently been unapproved by the Department, as per DOE Circular L3/09. Cork County Council has written to the Department seeking reapproval of the scheme. The occupancy of new dwellings in Glebe and Knockaneowen is dependent on the provision of a new plant.

For the purposes of this application the relevant PE chosen for the licence period is 990, being the PE estimated at the end of that period.

The current plant is overloaded. Upon completion of the new WWTP it shall be capable of accommodating additional hydraulic and organic loading without posing an environmental risk to the receiving water habitat.

### **B.9 (iii) Fees**

State the relevant Class of waste water discharge as per Column 1 of the Second Schedule, and the appropriate fee as per Columns 2 or 3 of the Third Schedule of the Waste Water Discharges (Authorisation) Regulations 2007, S.I. No. 684 of 2007.

| Class of waste water discharge   | Fee (in €) |
|--|------------|
| Discharges from agglomeration with a population equivalent of 500 to 1,000 | €10,000    |

| Appropriate Fee Included | Yes | No |
|--------------------------|-----|----|
|                          | √   |    |

### B.10 Capital Investment Programme

State whether a programme of works has been prioritised for the development of infrastructure to appropriately collect, convey, treat and discharge waste water from the relevant agglomeration. If a programme of works has been prioritised provide details on funding, (local or national), allocated to the capital project. Provide details on the extent and type of work to be undertaken and the likely timeframes for this work to be completed.

#### Upgrade Works

It is proposed to provide a new treatment plant in Coachford as a Serviced Land Initiative under the Water Services Investment Programme to cater for existing and future increased loads. A number of suitable sites have been identified. The scheme was approved by the DoEHLG in November 2007. Approval for all SLI schemes was withdrawn by the DoEHLG as per Circular L3/09 issued in April 2009. Cork County Council subsequently wrote to the DoEHLG in May 2009 seeking approval to continue to progress this scheme as an SLI. Cork County Council is awaiting a response from the DoEHLG relating to this request.

A number of sites have been identified for the location of the new plant. Detailed design has not been carried out to date.

**Attachment B.10** should contain the most recent development programme, including a copy of any approved funding for the project and a timeframe for the completion of the necessary works to take place.

| Attachment included | Yes | No |
|---------------------|-----|----|
|                     | √   |    |

### B.11 Significant Correspondence

Provide a summary of any correspondence resulting from a Section 63 notice issued by the Agency in relation to the waste water works under the Environmental Protection Agency Acts, 1992 and 2003, as amended by Section 13 of Protection of the Environment Act, 2003.

#### Not Applicable

There was no Section 63 notice issued by the Environmental Protection Agency to Cork County Council in relation to the wastewater treatment works in Coachford under the Environmental Protection Agency Acts, 1992 and 2003, as amended by Section 13 of Protection of the Environment Act, 2003.

**Attachment B.11** should contain a summary of any relevant correspondence issued in relation to a Section 63 notice.

| Attachment included | Yes | No |
|---------------------|-----|----|
|                     |     | √  |

### B.12 Foreshore Act Licences.

Provide a copy of the most recent Foreshore Act licence issued in relation to discharges from the waste water works issued under the Foreshore Act 1933.

#### Not Applicable

Coachford Wastewater Works does not require a Foreshore Act Licence under the Foreshore Act 1933.

**Attachment B.12** should contain the most recent licence issued under the Foreshore Act 1933, including a copy of **all** conditions attached to the licence and any monitoring returns for the previous 12-month period, if applicable.

| Attachment included | Yes | No |
|---------------------|-----|----|
|                     |     | √  |

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## **SECTION C: INFRASTRUCTURE & OPERATION**

Advice on completing this section is provided in the accompanying Guidance Note.

### **C.1 Operational Information Requirements**

Provide a description of the plant, process and design capacity for the areas of the waste water works where discharges occur, to include a copy of such plans, drawings or maps, (site plans and location maps, process flow diagrams), and such other particulars, reports and supporting documentation as are necessary to describe all aspects of the area of the waste water works discharging to the aquatic environment. Maps and drawings must be no larger than A3 size.

#### **C.1.1 Storm Water Overflows**

For each storm water overflow within the waste water works the following information shall be submitted:

- An assessment to determine 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, and
- Identify whether any of the storm water overflows are to be decommissioned, and identify a date by which these overflows will cease, if applicable.

A storm overflow on the sewer network is located approximately 57m west of the entrance to the plant. It consists of 2 no. 225mm pipes which discharge to an open drain in periods of heavy rain. There is no information available in relation to the frequency of discharge to this overflow.

There are no plans at present to decommission this overflow.

#### **C.1.2 Pumping Stations**

For each pump station operating within the waste water works, provide details of the following:

- Number of duty and standby pumps at each pump station;
- The measures taken in the event of power failure;
- Details of storage capacity at each pump station;
- Frequency and duration of activation of emergency overflow to receiving waters. Clarify the location where such discharges enter the receiving waters.

There are no pump stations operating within the waste water works.

### **C.1 Operation Information**

#### **Existing Waste Water Treatment Plant**

The waste water in Coachford village is collected in a partially separated foul sewerage collection system, consisting of approximately 3050 lin.m. of pipework. The waste water collection system primarily serves Fr. Sheehan Place, some long established houses and the primary and secondary schools which are the most significant non-domestic discharge.

The septic tank is located in the townland of Clontead Beg within the Cork County Council storage yard. The septic tank was constructed in the 1950's. The septic tank provides primary treatment which discharges into the River Lee.

In order to assess the design capacity (design Population) of the septic tank the following calculation was used:

$C = 180P + 2000$  where C is the capacity of the tank (in litres) and P is the design population. Using this formula the septic tank can sufficiently cater for a population of 402 persons. It should be noted that this formula was obtained from BS6297:1983, this standard has been superseded in 2007 (BS6294:2007) however the new standard does not give any formulae for assessing the capacity of septic tanks. So for the basis of this application BS6297:1983 is used.

The septic tank provides primary settlement only, which according to the National Urban Waste Water Study (NUWWS) reduces the BOD load by approximately 30% and the Suspended Solids load by approximately 50%.

The actual PE entering the existing treatment plant is approximately 726. This is based on a Scoping Study carried out on behalf of Cork County Council in 2005. Domestic figures were based on a combination of data from the 2002 census and a house count. Non-domestic loadings were calculated by identifying the non-domestic premises and basing loadings on figures given in the EPA Wastewater Treatment Manual - Treatment Systems for Small Communities, Business, Leisure Centres and Hotels. It is unlikely that there has been any significant change in these figures since 2005.

The waste water enters the septic tank via 2 no. gravity sewers, both 225mm diameter. An overflow pipe located approximately 57m west of the entrance to the plant consists of 2 no. 225mm pipes which discharge to an open drain in periods of heavy rain.

At present the effluent enters the plant by gravity from 2 separate directions. The effluent combines in the inlet channel and then separates into 2 concrete channels and enters the septic tank. There are 2 chambers within the septic tank of equal size. The treated effluent discharges from each chamber of the septic tank into an open channel.

The open channel discharges into a closed outfall pipe of diameter 225mm. The treated effluent flows from the open channel to the outfall, a distance of approximately 1.4km. The treated effluent discharges to the River Lee in the townland of Nadrid. This area was flooded in 1957 as part of the River Lee Hydro-electricity Scheme and the outfall pipe is no longer visible.

### **C.1.1 Storm Water Overflow**

An overflow pipe on the sewer network is located approximately 57m west of the entrance to the plant. It consists of 2 no. 225mm pipes which discharge to an open drain in periods of heavy rain. There is no information available in relation to the frequency of discharge to this overflow.

### **C.1.2 Pumping Stations – Not Applicable**

**Attachment C.1** should contain supporting documentation with regard to the plant and process capacity, systems, storm water overflows, emergency overflows, etc., including flow diagrams of each with any relevant additional information.



These drawings / maps should also be provided as geo-referenced digital drawing files (e.g. ESRI Shapefile, MapInfo Tab, AutoCAD or other upon agreement) in Irish National Grid Projection. This data should be provided to the Agency on a separate CD-Rom containing sections B.1, B.2, B.3, B.4, B.5, D.2, E.3 and F.2.

| Attachment included | Yes | No |
|---------------------|-----|----|
|                     | √   |    |

## C.2 Outfall Design and Construction

Provide details on the primary discharge point & secondary discharge points and storm overflows to include reference, location, design criteria and construction detail.

### Primary Discharge Point, SW01-Coachford

|                          |   |
|--------------------------|---|
| <b>Type of Discharge</b> | 225mm diameter outfall pipe from the septic tank to the discharge point in the River Lee in the townland of Nadrid, a distance of approximately 1.4km from the septic tank. |
| <b>Unique Point Code</b> | SW01 – Coachford  |
| <b>Location</b>          | River Lee, Nadrid   |
| <b>Grid Ref</b>          | 145231E, 072297N  |

### Storm Water Overflow Point, SW02-Coachford

|                          |                         |
|--------------------------|-------------------------|
| <b>Type of Discharge</b> | 225mm overflow pipe     |
| <b>Unique Point Code</b> | SW02 – Coachford        |
| <b>Location</b>          | Clontead Beg, Coachford |
| <b>Grid ref (6E, 6N)</b> | 145955E, 073162N        |

### Storm Water Overflow Point, SW03-Coachford

|                          |                         |
|--------------------------|-------------------------|
| <b>Type of Discharge</b> | 225mm overflow pipe     |
| <b>Unique Point Code</b> | SW03 – Coachford        |
| <b>Location</b>          | Clontead Beg, Coachford |
| <b>Grid ref (6E, 6N)</b> | 145947E, 073165N        |

**Attachment C.2** should contain any supporting documentation on the design and construction of any and all discharge outfalls, including stormwater overflows, from the waste water works.

| Attachment included | Yes | No |
|---------------------|-----|----|
|                     |     | √  |

## SECTION D: DISCHARGES TO THE AQUATIC ENVIRONMENT

Advice on completing this section is provided in the accompanying Guidance Note.

Give particulars of the source, location, nature, composition, quantity, level and rate of discharges arising from the agglomeration and, where relevant, the period or periods during which such emissions are made or are to be made.

Details of all discharges of waste water from the agglomeration should be submitted via the following web based link: [http://78.137.160.73/epa\\_wwd\\_licensing/](http://78.137.160.73/epa_wwd_licensing/). The applicant should address in particular all discharge points where the substances outlined in Tables D.1(i), (b) & (c) and D.1(ii), (b) & (c) of Annex 1 are emitted.

Where it is considered that any of the substances listed in Annex X of the Water Framework Directive (2000/60/EC) or any of the Relevant Pollutants listed in Annex VIII of the Water Framework Directive (2000/60/EC) are being discharged from the waste water works or are seen to be present in the receiving water environment downstream of a discharge from the works (as a result of any monitoring programme, e.g., under the Water Framework Directive Programme of Measures) the applicant shall screen the discharge for the relevant substance.

### D.1 Discharges to Surface Waters

Details of all discharges of waste water from the agglomeration should be supplied via the following web based link: [http://78.137.160.73/epa\\_wwd\\_licensing/](http://78.137.160.73/epa_wwd_licensing/). Tables D.1(i)(a), (b) & (c), should be completed for the primary discharge point from the agglomeration and Tables D.1(ii)(a), (b) & (c) should be completed for **each** secondary discharge point, where relevant. Table D.1(iii)(a) should be completed for **each** storm water overflow. Individual Tables must be completed for each discharge point.

Where monitoring information is available for the influent to the plant this data should also be provided in response to Section D.1.

Supporting information should form **Attachment D.1**

| Attachment included | Yes | No |
|---------------------|-----|----|
|                     | √   |    |

## D.2 Tabular Data on Discharge Points

Applicants should submit the following information for each discharge point:

**Table D.2:**

| PT_CD          | PT_TYPE | LA_NAME             | RWB_TYPE | RWB_NAME  | DESIGNATION | EASTING | NORTHING |
|----------------|---------|---------------------|----------|-----------|-------------|---------|----------|
| SW01-Coachford | Primary | Cork County Council | River    | River Lee | Salmonid    | 145231  | 072297   |

An individual record (i.e. row) is required for each discharge point. Acceptable file formats include Excel, Access or other upon agreement with the Agency. A standard Excel template can be downloaded from the EPA website at [www.epa.ie](http://www.epa.ie). This data should be submitted to the Agency on a separate CD-Rom containing sections B.1, B.2, B.3, B.4, B.5, C.1, E.3 and F.2.

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## SECTION E: MONITORING

Advice on completing this section is provided in the accompanying Guidance Note.

### E.1 Waste Water Discharge Frequency and Quantities – Existing & Proposed

Provide an estimation of the quantity of waste water likely to be emitted in relation to all primary and secondary discharge points applied for. This information should be included in Table E.1(i) via the following web based link: [http://78.137.160.73/epa\\_wwd\\_licensing/](http://78.137.160.73/epa_wwd_licensing/).

Provide an estimation of the quantity of waste water likely to be emitted in relation to all storm water overflows within the agglomeration applied for. This information should be included in Table E.1(ii) via the following web based link: [http://78.137.160.73/epa\\_wwd\\_licensing/](http://78.137.160.73/epa_wwd_licensing/).

Indicate if composite sampling or continuous flow monitoring is in place on the primary or any other discharge points. Detail any plans and timescales for the provision of composite sampling and continuous flow meters.

There is no composite sampling or composite flow monitoring on the primary discharge point.

### E.2 Monitoring and Sampling Points

Programmes for environmental monitoring should be submitted as part of the application. These programmes should be provided as Attachment E.2.

Reference should be made to, provision of sampling points and safe means of access, sampling methods, analytical and quality control procedures, including equipment calibration, equipment maintenance and data recording/reporting procedures to be carried out in order to ensure accurate and reliable monitoring.

In determining the sampling programme to be carried out, the variability of the emission and its effect on the receiving environment should be considered.

### Monitoring in respect of Coachford Waste Water Licence Application

Currently the Environmental Directorate of Cork County Council does not monitor the treatment plant as it is under 2000PE. Grab samples of the influent and the effluent were taken for the purposes of this waste water discharge licence application.

### Monitoring on the River Lee

The main channel of the River Lee from source to Cork City waterworks at Lee Road is designated Salmonid Waters under the Salmonid Regulations. Monitoring on the River Lee is carried out monthly by the Environment Department in accordance with the Salmonid Regulations and the Water Framework Directive.

### General Laboratory Information

The Wastewater Laboratory of Cork County Council is accredited for a number of analytical tests under the Irish National Accreditation Board (INAB) under the ISO 17025 international standard. The details of the Accreditation can be found in Attachment E.2. The Wastewater Laboratory of Cork County Council is currently accredited for the following parameters under the ISO 17025 system:

- pH
- Biochemical Oxygen Demand
- Chemical Oxygen Demand
- Suspended Solids
- Ammonia
- Ortho Phosphates
- Total Phosphates
- Chloride
- Sulphate

The laboratory perform a number of analytical tests e.g. fats, oil , grease and metals using an ICP-OES system and while the Wastewater Laboratory of Cork County Council is not currently accredited for extra tests the same analytical procedures and protocol are adhered to by the laboratory as would be required if the tests were accredited. The laboratory also participates in proficiency testing schemes which measure the accuracy of the results and performance of the laboratory in both the EPA scheme and the WRC Aquacheck scheme from the UK. The performance of the laboratory in these schemes is excellent and the non-accredited tests are within the performance criteria for the schemes as evaluated by the scheme coordinators.

Details of any accreditation or certification of analysis should be included. **Attachment E.2** should contain any supporting information.

|                            |            |           |
|----------------------------|------------|-----------|
| <b>Attachment included</b> | <b>Yes</b> | <b>No</b> |
|                            | √          |           |

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### E.3 Tabular data on Monitoring and Sampling Points

Applicants should submit the following information for each monitoring and sampling point:

| <b>PT_CD</b> | <b>PT_TYPE</b> | <b>MON_TYPE</b> | <b>EASTING</b> | <b>NORTHING</b> | <b>VERIFIED</b> |
|--------------|----------------|-----------------|----------------|-----------------|-----------------|
| SW01         | Primary        | Sampling        | 145231E        | 072297N         | N               |
| aSW01u       | u/s            | Sampling        | 145242E        | 072501N         | N               |

|        |     |          |         |         |   |
|--------|-----|----------|---------|---------|---|
| aSW01d | d/s | Sampling | 146150E | 071797N | N |
|--------|-----|----------|---------|---------|---|

An individual record (i.e., row) is required for each monitoring and sampling point. Acceptable file formats include Excel, Access or other upon agreement with the Agency. A standard Excel template can be downloaded from the EPA website at [www.epa.ie](http://www.epa.ie). This data should be submitted to the Agency on a separate CD-Rom containing sections B.1, B.2, B.3, B.4, B.5, C.1, D.2 and F.2.

#### E.4 Sampling Data

Regulation 16(1)(h) of the Waste Water Discharge (Authorisation) Regulations 2007 requires all applicants in the case of an existing waste water treatment plant to specify the sampling data pertaining to the discharge based on the samples taken in the 12 months preceding the making of the application.

Regulation 16(1)(l) of the regulations requires applicants to give details of compliance with any applicable monitoring requirements and treatment standards.

**Attachment E.4** should contain any supporting information.

| Attachment included | Yes | No |
|---------------------|-----|----|
|                     | √   |    |

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## **SECTION F: EXISTING ENVIRONMENT & IMPACT OF THE DISCHARGE(S)**

*Advice on completing this section is provided in the accompanying Guidance Note.*

Detailed information is required to enable the Agency to assess the existing receiving environment. This section requires the provision of information on the ambient environmental conditions within the receiving water(s) upstream and downstream of any discharge(s).

Where development is proposed to be carried out, being development which is of a class for the time being specified under Article 24 (First Schedule) of the Environmental Impact Assessment Regulations, the information on the state of the existing environment should be addressed in the EIS. **In such cases, it will suffice for the purposes of this section to provide adequate cross-references to the relevant sections in the EIS.**

### **F.1. Assessment of Impact on Receiving Surface or Ground Water**

- Give summary details and an assessment of the impacts of any existing or proposed emissions on the environment, including environmental media other than those into which the emissions are to be made.
- Details of all monitoring of the receiving water should be supplied via the following web based link: [http://78.137.160.73/epa\\_wwd\\_licensing/](http://78.137.160.73/epa_wwd_licensing/). Tables F.1(i)(a) & (b) should be completed for the primary discharge point. Surface water monitoring locations upstream and downstream of the discharge point shall be screened for those substances listed in Tables F.1(i)(a) & (b). Monitoring of surface water shall be carried out at not less than two points, one upstream from the discharge location and one downstream.
- For discharges from secondary discharge points Tables F.1(ii)(a) & (b) should be completed. Furthermore, provide summary details and an assessment of the impacts of any existing or proposed emissions on the surface water or ground (aquifers, soils, sub-soils and rock environment), including any impact on environmental media other than those into which the emissions are to be made.
- Provide details of the extent and type of ground emissions at the works. For larger discharges to groundwaters, e.g., from Integrated Constructed Wetlands, large scale percolation areas, etc., a comprehensive report must be completed which should include, inter alia, topography, meteorological data, water quality, geology, hydrology, and hydrogeology. The latter must in particular present the aquifer classification and vulnerability. The Geological Survey of Ireland Groundwater Protection Scheme Dept of the Environment and Local Government, Geological Survey of Ireland, EPA (1999) methodology should be used for any such classification. This report should also identify all surface water bodies and water wells that may be at risk as a result of the ground discharge.
- Describe the existing environment in terms of water quality with particular reference to environmental quality standards or other

legislative standards. Submit a copy of the most recent water quality management plan or catchment management plan in place for the receiving water body. Give details of any designation under any Council Directive or Regulations that apply in relation to the receiving water.

- Provide a statement as to whether or not emissions of main polluting substances (as defined in the *Dangerous Substances Regulations S.I. No. 12 of 2001*) to water are likely to impair the environment.
- In circumstances where water abstraction points exist downstream of any discharge describe measures to be undertaken to ensure that discharges from the waste water works will not have a significant effect on faecal coliform, salmonella and protozoan pathogen numbers, e.g., *Cryptosporidium* and *Giardia*, in the receiving water environment.
- Indicate whether or not emissions from the agglomeration or any plant, methods, processes, operating procedures or other factors which affect such emissions are likely to have a significant effect on –
  - (a) a site (until the adoption, in respect of the site, of a decision by the European Commission under Article 21 of Council Directive 92/43/EEC for the purposes of the third paragraph of Article 4(2) of that Directive) –
    - (i) notified for the purposes of Regulation 4 of the Natural Habitats Regulations, subject to any amendments made to it by virtue of Regulation 5 of those Regulations,
    - (ii) details of which have been transmitted to the Commission in accordance with Regulation 5(4) of the Natural Habitats Regulations, or
    - (iii) added by virtue of Regulation 6 of the Natural Habitats Regulations to the list transmitted to the Commission in accordance with Regulation 5(4) of those Regulations,
  - (b) a site adopted by the European Commission as a site of Community importance for the purposes of Article 4(2) of Council Directive 92/43/EEC<sup>1</sup> in accordance with the procedures laid down in Article 21 of that Directive,
  - (c) a special area of conservation within the meaning of the Natural Habitats Regulations, or
  - (d) an area classified pursuant to Article 4(1) or 4(2) of Council Directive 79/409/EEC<sup>2</sup>;

<sup>1</sup>Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora (OJ No. L 206, 22.07.1992)

<sup>2</sup>Council Directive 79/409/EEC of 2 April 1979 on the conservation of wild birds (OJ No. L 103, 25.4.1979)



- Describe, where appropriate, measures for minimising pollution over long distances or in the territory of other states.
- This section should also contain full details of any modelling of discharges from the agglomeration. Full details of the assessment and any other relevant information on the receiving environment should be submitted as **Attachment F.1.**

| Attachment included | Yes | No |
|---------------------|-----|----|
|                     | √   |    |

**Describe the existing environment in terms of water quality with particular reference to environmental quality standards or other legislative standards. Submit a copy of the most recent water quality management plan or catchment management plan in place for the receiving water body. Give details of any designation under any Council Directive or regulations that apply in relation to the receiving water.**

The receiving water body of the existing Coachford WWTP is the River Lee. The River is a reservoir at this location since the construction of the Inniscarra Dam as part of the River Lee Hydro-Electric Scheme in the 1950's. The flow from the lake is controlled by the ESB.

A storm water overflow in the collection system discharges to a small stream which discharges to the Dripsey River and ultimately to the River Lee. There are no discharges to ground, or any other media.

It is not known at this stage if the storm overflow will remain when the plant is upgraded. It is not proposed, at this stage, that there will be any discharges to ground, or any other media.

Specific localised EPA flow data is not available in the vicinity of the existing discharge points and thus figures have been taken from available South Western River Basin District data.

These flow estimates including 95%ile and median flows are shown in the table below.

Table F1-1: Flow Data

| Parameter                       | RBD Data obtained from Cork County Council |
|---------------------------------|--|
| <b>95%ile (m<sup>3</sup>/s)</b> | 2.7036                                     |
| <b>Median (m<sup>3</sup>/s)</b> | 20.2483                                    |

With an estimated 95-percentile flow (i.e. a flow that is exceeded 95% of the time) of 2703.6 l/sec, or 233,591m<sup>3</sup>/day, there are 1,783 dilutions available in the River Lee for the discharge (131 m<sup>3</sup>/d).

### **Receiving Environment**

Water Quality analysis data for the Blarney River was undertaken by Cork County Council and this is presented in Attachment F1. The EPA also takes samples from a number of locations along the River Lee upstream and

downstream of the discharge point. Three of these are located at Dromcarra Bridge, Inniscarra and at Leemount Bridge.

Table F1-2: Biological Quality Rating for River Lee

| Sampling Location | EPA Biological Quality Rating (Q-Values) |      |      |      |      |
|-------------------|--|------|------|------|------|
|                   | 1994                                     | 1997 | 1999 | 2002 | 2005 |
| Dromcarra Bridge  | 4-5                                      | 4-5  | 4    | 4    | 4    |
| Inniscarra Bridge | 3  | 3    | 3    | 3    | 3    |
| Leemount Bridge   | 4  | 4    | 4    | 4    | 4    |

### Effluent Standards

The UWWTP provides a framework for action to deal with the pollution threat from urban and industrial wastewater. The principal requirement of the UWWTD is that: "The design, construction and maintenance of collection systems shall be undertaken in accordance with the best technical knowledge not entailing excessive costs, notably regarding:

- Volume and characteristics of urban wastewater
- Prevention of leaks
- The limitation of pollution of receiving waters due to storm water overflows"

In a footnote to the above requirements, the directive recognises that it is not possible in practice to construct collection systems and treatment plants in a way such that all wastewater can be treated during situations such as unusually heavy rainfall. As a result, it requires Member States to decide on measures to limit pollution from storm water overflows and suggests that such measures:

- could be based on:
  - Dilution rates
  - Capacity in relation to dry weather flow
- Could specify a certain acceptable number of overflows per year.

As specified in the S.I. No. 254 of 2001, Urban Waste Water Treatment Regulation, 2001:

"A sanitary authority shall ensure by 31 December 2005 that urban waste water entering a collection system shall before discharge be subject to appropriate treatment in the following cases:

- in respect of discharges to freshwater and estuaries from agglomerations with a population equivalent of less than 2,000;
- in respect of discharges to coastal waters from agglomerations with a population equivalent of less than 10,000."

Since the septic tank is deemed to provide adequate treatment it is currently complying with the Urban Waste Water Treatment Directive 91/271/EEC.

Notwithstanding this compliance with the directive a programme of works detailed in Attachment B.10 is proposed to improve effluent quality and to cater for the future load.

### Water Quality Standards

The Water Framework Directive (WFD) aims to establish an integrated approach to water protection, improvement and sustainable use. In order to achieve the requirements of the WFD, Ireland has been divided into a number of River Basin Districts or management units. The South Western River Basin District (SWRBD) comprises substantially the counties of Cork and Kerry, all of Cork City, and also parts of counties Limerick, South Tipperary and Waterford.

The River Lee is included in the SWRBD. The overall objectives of the SWRBD project include the following:

- Strengthen compliance with EU Directives and national legislation
- Collect and analyse information to determine water quality and identify possible threats to water status
- Prevent further deterioration and protect/enhance water quality
- Develop a programme of measures to address all significant pressures and sources of impact on aquatic ecosystems and groundwater
- Encourage and facilitate public participation including the maintenance of a project website
- Promote sustainable water use

In order to achieve these objectives the following project tasks have been identified:

- Identify pressures on water bodies and assess risk of not achieving compliance with the Water Framework Directive
- Prepare a Characterisation Report
- Identify Heavily Modified (HMWB) and Artificial Water Bodies (AWB)
- Establish risk to waters from Hazardous Substances
- Establish data management system and GIS
- Prepare programme of measures
- Review of monitoring needs
- Design monitoring programme
- Prepare River Basin Management Strategy
- Assist public participation in the project
- Prepare printed reports
- Assist capacity building

The SWRBD have determined the Ecological Status as Poor for the Lee waterbody which encompasses the discharge location. This is due to the macroinvertebrates and the overall ecological status. The Water framework Objective is Restore. Ref attachment F1.

### ***Designations under relevant directives***

#### River Lee:

The River Lee is not a designated Shellfish area under the Shellfish Waters Regulations, S.I.200 of 1994.

The River Lee is designated as Salmonid Water under Salmonid Water Regulations, S.I. 293 of 1988 from its source to the Cork City Waterworks at Lee Road. Sampling is carried out monthly by the Environment Department in accordance with the Salmonid Regulations. Testing is carried out upstream of the plant at Carrigadrohid and downstream at Rooves Beg and Inniscarra Bridge.

The River Lee is not designated a Bathing Water under the Bathing Water Regulations, S.I. 178 of 1998 as amended.

The River Lee is not a designated Sensitive Area under the Urban Wastewater Treatment Regulations 2001 (S.I. 254 of 2001).

### **Areas of Conservation**

The Department of the Environment, Heritage and Local Government is responsible for the designation of conservation sites in Ireland. It is required under European law and national laws to conserve habitats and species, through designation of conservation areas under Special Areas of Conservation, Natural Heritage Areas and Special Protected Areas.

#### *Special Areas of Conservation:*

Candidate Special Areas of Conservation (cSACs) are protected under the European Union (EU) Habitats Directive (92/43/EEC), as implemented in Ireland by the European Communities (Natural Habitats) Regulations, 1997.

There are no Special Areas of Conservation (SACs) located along the River Lee in the proximity of the discharge from the waste water works. There is a Special Area of Conservation located in The Gearagh, approximately 17km upstream of the discharge point. This is not impacted on by the waste water works.

#### *Natural Heritage Areas:*

Natural Heritage Areas are the basic designation for wildlife. An NHA is an area considered important for the habitats present or which holds species of plants and animals whose habitat needs protection.

Under the Wildlife Amendment Act 2000, NHAs are legally protected from damage from the date they are formally proposed for designation.

There are no Natural Heritage Areas (NHAs) located along the River Lee in the proximity of the discharge from the waste water works.

#### *Special Protected Areas:*

Special Protection Areas (SPAs) are designated in order to safeguard certain habitats pursuant to EU Directive requirements. The EU Birds Directive (79/409/EEC) requires designation of SPAs for listed rare and vulnerable species, migratory species and wetlands.

There are no Special Protection Areas (SPAs) located along the River Lee in the proximity of the discharge from the waste water works. There is a Special Area of Conservation located in The Gearagh, approximately 17km upstream of the discharge point. This is not impacted on by the waste water works.

**Give summary details and an assessment of the impacts of any existing or proposed emissions on the environment, including environmental media other than those to which the emissions are made.**

### **Assimilative Capacity of the Receiving Water**

#### a) **Mass Balance Equation for Orthophosphate:**

Median flow of River = 20.2483 m<sup>3</sup>/sec  
 Median oPO<sub>4</sub>-P in River (upstream) = <0.05mg/L

Average volume of discharge = 0.00206 m<sup>3</sup>/sec  
 Median value for O-PO<sub>4</sub>-P in discharge = 10 mg/L

$$C_{\text{final}} = \frac{(20.2483 \times 0.05) + (0.00206 \times 10)}{20.2483 + 0.00206}$$

$$C_{\text{final}} = 0.051 < \text{mg/L oPO}_4\text{-P}$$

The increase in Orthophosphate due to the discharge of Coachford WWTP is 0.001 <mg/L. The increase in the river due to Orthophosphate is very insignificant; it will not have a major effect on the overall status of the river. The upstream figure of <0.05mg/L is also a conservative figure based on grab samples.

#### b) **Mass Balance Equation for BOD:**

Flow of River (95%) = 2.7036 m<sup>3</sup>/sec  
 Average BOD in River (upstream) = 1.0 mg/L

Average volume of discharge = 0.00206 m<sup>3</sup>/sec  
 Average BOD in discharge = 210 mg/L

$$C_{\text{final}} = \frac{(2.7036 \times 1.0) + (0.00206 \times 210)}{2.7036 + 0.00206}$$

$$C_{\text{final}} = 1.16 \text{mg/L BOD}$$

The increase in BOD due to the discharge of Coachford WWTP is 0.16 mg/L.

#### c) **Mass Balance Equation for Suspended Solids:**

Flow of River (95%) = 2.7036 m<sup>3</sup>/sec  
 Average Suspended Solids in River (upstream) = 2.5mg/L

Average volume of discharge = 0.00206 m<sup>3</sup>/sec  
 Average Suspended Solids in discharge = 250mg/L

$$C_{\text{final}} = \frac{(2.7036 \times 2.5) + (0.00206 \times 250)}{2.7036 + 0.00206}$$

$$C_{\text{final}} = 2.69 \text{mg/L Suspended Solids}$$

The increase in Suspended Solids due to the discharge of Coachford WWTP is 0.19 mg/L.

Assimilative Capacity Calculations were not performed for the following parameters, as current levels are below those required by S.I. No. 12/2001

- (a) Arsenic
- (b) Chromium
- (c) Copper
- (d) Cyanide
- (e) Fluoride
- (f) Lead
- (g) Nickel
- (h) Zinc

**Provide details of the extent and type of ground emissions at the works.**

There are no emissions to ground at the works.

**Provide a statement as to whether or not emissions of main polluting substances (as defined in the Dangerous Substances Regulations S. I. No 12 of 2001) to water are likely to impair the environment.**

A screening programme was undertaken for the parameters set out in the Dangerous Substances Regulations S. I. No 12 of 2001 with the exception of tributyltin as per the table below. This programme measured the levels in the discharge from the existing WWTP and measured river levels (upstream and downstream of the existing primary discharge point) on the Lee. River levels were measured on two occasions, 28/01/2009 and 02/04/2009. Septic tank inlet levels were measured once (28/01/2009) and outlet levels were measured on 7 occasions from 07/02/2008 to 12/02/2009. Figures in the table are averages of all dates that tests were carried out.

It is evident that all parameters measured downstream were found to be below levels required by the Dangerous Substances Regulations.

| Parameter       | Discharge | Influent | Upstream | Downstream |
|-----------------|-----------|----------|----------|------------|
|                 | µg/l      | µg/l     | µg/l     | µg/l       |
| Atrazine        | <0.01     | <0.01    | <0.01    | <0.01      |
| Dichloromethane | <1        | <1       | <1       | <1         |
| Simazine        | <0.01     | <0.01    | <0.01    | <0.01      |
| Toluene         | <1        | <1       | <1       | <1         |
| Tributyltin     |           |          |          |            |
| Xylenes         | <1        | <1       | <1       | <1         |
| Arsenic         | <0.96     | <0.96    | <0.96    | <0.96      |
| Chromium        | <20       | <20      | <20      | <20        |
| Copper          | 15.71     | <20      | <20      | <20        |
| Cyanide         | <5        | <5       | <5       | <5         |
| Fluoride        | 31        | 31       | 38       | 33         |
| Lead            | 19.43     | <20      | <20      | <20        |
| Nickel          | <20       | <20      | <20      | <20        |
| Zinc            | 62.14     | <20      | <20      | <20        |
| Boron           | 94.57     | <20      | <20      | <20        |

|          |       |     |       |      |
|----------|-------|-----|-------|------|
| Cadmium  | <20   | <20 | <20   | <20  |
| Mercury  | <0.2  | 2   | <0.2  | <0.2 |
| Selenium | 2.5   | 1.4 | 1     | 0.8  |
| Barium   | 86.14 | 62  | 68.85 | 62   |

It can be concluded that emissions to water at the discharge point is not likely to impair the environment.

**In circumstances where water abstraction exist downstream of any discharge describe measures to be undertaken to ensure that discharges from the wastewater works will not have a significant effect on faecal coliform, salmonella and protozoan pathogen numbers, e.g., iardia, in the receiving water environment.**

Inniscarra Waterworks is located approximately 9.6km downstream of the discharge. Water is abstracted from the reservoir into which the septic tank discharges.

The raw water intake at Inniscarra is tested each day for the following:

pH  
Temperature  
Colour  
Turbidity

The raw water intake and treated water is tested weekly for Cryptosporidium and Giardia. There have been no non-compliances in the past 12 months.

Sampling done by the Environment Department under the Water Framework Directive and the Salmonid Regulations shows that the discharge has no significant effect on the receiving waters.

The Lee Road City Waterworks is much further downstream of the discharge point. The discharge should have no effect on the raw water intake at that location given the assimilative capacity of the river.

**Indicate whether or not the emissions from the agglomeration or any plant, methods, processes, operating procedures or other factors which affect such emissions are likely to have an effect a Natural Heritage Area, site of community importance under the habitats directive, special area of conservation or a site classified under the conservation of wildbirds directive.**

It is not considered that the emissions for the agglomeration or any plant, methods, processes, operating procedures or other factors which affect such emissions are likely to have an effect a Natural Heritage Area, site of community importance under the habitats directive, special area of conservation or a site classified under the conservation of wildbirds directive.

**Describe, where appropriate, measures for minimising pollution over long distances or in the territory of other states.**

Given the nature and scale of the discharges to the receiving environment it is not considered necessary to provide any additional measures specific to minimising pollution over long distances or in the territory of other states.

### **Details of any modelling of discharges from the agglomeration.**

No modelling has been undertaken of the discharges from the agglomeration.

### **F.2 Tabular Data on Drinking Water Abstraction Point(s)**

Applicants should submit the following information for each downstream or downgradient drinking water abstraction point. The zone of contribution for the abstraction point should be delineated and any potential risks from the waste water discharge to the water quality at that abstraction point identified.

| <b>ABS_CD</b>    | <b>AGG_SERVED</b>    | <b>ABS_VOL</b>                            | <b>PT_CD</b>                    | <b>DIS_DS</b>  | <b>EASTING</b>                              | <b>NORTHING</b>                             | <b>VERIFIED</b>                  |
|------------------|----------------------|---|---------------------------------|--|---|---|----------------------------------|
| Abstraction Code | Agglomeration Served | Abstraction Volume in m <sup>3</sup> /day | Point Code<br>Provide label IDs | Distance Downstream in meters from emission point to abstraction point | 6E- Digit GPS National Irish Grid Reference | 6N- Digit GPS National Irish Grid Reference | Y = GPS Used<br>N = GPS not used |

**Note:** Attach any risk assessment that may have been carried out in relation to the abstraction point(s) listed.

The effluent from the existing primary discharge point discharges to the River Lee within the reservoir for the ESB hydro-electric scheme. Inniscarra Waterworks is downstream of the plant and abstracts water from the reservoir.

Inniscarra Waterworks is located approximately 9.6km downstream of the discharge. Water is abstracted from the reservoir into which the septic tank discharges.

The raw water intake at Inniscarra is tested each day for the following:

pH  
Temperature  
Colour  
Turbidity

Testing is carried out weekly since 2007 on the raw water intake and the treated water for Cryptosporidium and Giardia. Since weekly testing commenced there has been one detection of Cryptosporidium and one detection of Giardia in the raw water intake. No traces of Cryptosporidium or Giardia have been found in the treated water.

Sampling done by the Environment Department for the water abstraction and the Salmonid Regulations shows that the discharge has no significant effect on the receiving waters.

The Lee Road City Waterworks is much further downstream of the discharge point. The discharge should have no effect on the raw water intake at that location given the assimilative capacity of the river.

An individual record (i.e. row) is required for each abstraction point. Acceptable file formats include Excel, Access or other upon agreement with the Agency. A standard Excel template can be downloaded from the EPA website at



www.epa.ie. This data should be submitted to the Agency on a separate CD-Rom containing sections B.1, B.2, B.3, B.4, B.5, C.1, D.2 and E.3.

**Attachment F.2** should contain any supporting information.

| <b>Attachment included</b> | <b>Yes</b> | <b>No</b> |
|----------------------------|------------|-----------|
|                            | √          |           |

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## SECTION G: PROGRAMMES OF IMPROVEMENTS

Advice on completing this section is provided in the accompanying Guidance Note.

### G.1 Compliance with Council Directives

Provide details on a programme of improvements to ensure that emissions from the agglomeration or any premises, plant, methods, processes, operating procedures or other factors which affect such emissions will comply with, or will not result in the contravention of the;

- Dangerous Substances Directive 2006/11/EC,
- Water Framework Directive 2000/60/EC,
- Birds Directive 79/409/EEC,
- Groundwater Directives 80/68/EEC & 2006/118/EC,
- Drinking Water Directives 80/778/EEC,
- Urban Waste Water Treatment Directive 91/271/EEC,
- Habitats Directive 92/43/EEC,
- Environmental Liabilities Directive 2004/35/EC,
- Bathing Water Directive 76/160/EEC, and
- Shellfish Waters Directive (79/923/EEC).

#### Dangerous Substances Directive 2006/11/EC

A screening programme was undertaken for the parameters set out in the Dangerous Substances Regulations S. I. No 12 of 2001 with the exception of tributyltin. This programme measured the levels in the discharge from the existing WWTP and measured river levels (upstream and downstream of the existing primary discharge point) on the Lee. River levels were measured on two occasions, 28/01/2009 and 02/04/2009. Septic tank inlet levels were measured once (28/01/2009) and outlet levels were measured on 7 occasions from 07/02/2008 to 12/02/2009.

It is evident that all parameters measured downstream were found to be below levels required by the Dangerous Substances Regulations. It can be concluded that emissions to water at the discharge point is not likely to impair the environment.

#### Water Framework Directive 2000/60/EC

The River Lee has been determined to have Poor Status under the Water Framework Directive with an objective to Restore.

The assimilative capacity assessments set out in Section F1 demonstrate that the current discharge is compliant with the water framework directive.

#### Birds Directive 79/409/EEC

Special Protection Areas (SPAs) are designated in order to safeguard certain habitats pursuant to EU Directive requirements. The EU Birds Directive (79/409/EEC) requires designation of SPAs for listed rare and vulnerable species, migratory species and wetlands.

There are no Special Protection Areas (SPAs) located along the River Lee in the proximity of the discharge from the waste water works. There is a Special Area of Conservation located in The Gearagh, approximately 17km upstream of the discharge point. This is not impacted on by the waste water works.

### **Groundwater Directives 2006/118/EC**

There is no discharge to ground from the waste water works.

### **Drinking Water Directives 80/778/EEC**

The effluent from the existing primary discharge point discharges to the River Lee within the reservoir for the ESB hydro-electric scheme. Inniscarra Waterworks is downstream of the plant and abstracts water from the reservoir.

Inniscarra Waterworks is located approximately 9.6km downstream of the discharge. Water is abstracted from the reservoir into which the septic tank discharges. A maximum of 228,000m<sup>3</sup> is abstracted per day from the reservoir.

The raw water intake at Inniscarra is tested each day for pH, temperature, colour and turbidity. Testing is carried out weekly since 2007 on the raw water intake and the treated water for Cryptosporidium and Giardia.

Sampling done upstream and downstream of the discharge by the Environment Department for the Water Framework Directive and the Salmonid Regulations shows that the discharge is having no significant effect on the receiving waters.

The Lee Road City Waterworks is much further downstream of the discharge point. The discharge should have no effect on the raw water intake at that location given the assimilative capacity of the river.

### **Urban Waste Water Treatment Directive 91/271/EEC**

The UWWTP provides a framework for action to deal with the pollution threat from urban and industrial wastewater. The principal requirement of the UWWTD is that: "The design, construction and maintenance of collection systems shall be undertaken in accordance with the best technical knowledge not entailing excessive costs, notably regarding:

- Volume and characteristics of urban wastewater
- Prevention of leaks
- The limitation of pollution of receiving waters due to storm water overflows"

In a footnote to the above requirements, the directive recognises that it is not possible in practice to construct collection systems and treatment plants in a way such that all wastewater can be treated during situations such as unusually heavy rainfall. As a result, it requires Member States to decide on measures to limit pollution from storm water overflows and suggests that such measures:

- could be based on:
  - Dilution rates
  - Capacity in relation to dry weather flow
- Could specify a certain acceptable number of overflows per year.

As specified in the S.I. No. 254 of 2001, Urban Waste Water Treatment Regulation, 2001:

"A sanitary authority shall ensure by 31 December 2005 that urban waste water entering a collection system shall before discharge be subject to appropriate treatment in the following cases:

- in respect of discharges to freshwater and estuaries from agglomerations with a population equivalent of less than 2,000;
- in respect of discharges to coastal waters from agglomerations with a population equivalent of less than 10,000."

Since the septic tank is deemed to provide adequate treatment it is currently complying with the Urban Waste Water Treatment Directive 91/271/EEC.

It is proposed to provide a new treatment plant in Coachford under the Water Services Investment Programme. The new plant will be designed to comply with the Urban Wastewater Directive. A number of sites have been identified for the location of the new plant. Detailed design has not been carried out to date.

### **Habitats Directive 92/43/EEC**

The area which includes the River Lee is not a Candidate Special Area of Conservation.

### **Environmental Liabilities Directive 2004/35/EC**

The Environmental Liability Directive has not been addressed as part of this application. However it is noted that in order to meet the potential requirements of this directive a decision was taken to upgrade the treatment plant at Coachford. The Department of Environment previously approved funding under the Serviced Land Initiative Scheme for the provision of a new WWTP for the village of Coachford. However the scheme has recently been unapproved by the Department, as per DOE Circular L3/09. Cork County Council has written to the Department seeking reapproval of the scheme.

### **Bathing Water Directive 76/160/EEC**

The River Lee is not designated Bathing Waters under the Bathing Water Regulations, S.I. 178 of 1998 as amended.

### **Shellfish Directive 79/923/EEC**

The River Lee is not designated Shellfish Areas under the Shellfish Waters Regulations, S.I. 200 of 1994.

**Attachment G.1** should contain the most recent programme of improvements, including a copy of any approved funding for the project and a timeframe for the completion of the necessary works to take place.

| <b>Attachment included</b> | <b>Yes</b> | <b>No</b> |
|----------------------------|------------|-----------|
|                            | √          |           |

**G.2 Compliance with Water Quality Standards for Phosphorus Regulations (S.I. No. 258 of 1998).**

Provide details on a programme of improvements, including any water quality management plans or catchment management plans in place, to ensure that improvements of water quality required under the Water Quality Standards for Phosphorous Regulations (S.I. No. 258 of 1998) are being achieved. Provide details of any specific measures adopted for waste water works specified in Phosphorus Measures Implementation reports and the progress to date of those measures. Provide details highlighting any waste water works that have been Identified as the principal sources of pollution under the P regulations.

The WWTP does not incorporate phosphorus removal facilities, however, the recorded effluent figures for the septic tank are not excessively high with an average figure of 1.175mg/L

The plant discharges to the River Lee which has Poor Status under the Water Framework Directive. The Draft European Communities Environmental Objectives (Surface Waters) Regulations 2008 set out in Table 9 the requirement to achieve a Molbydate Reactive Phosphorus (MRP) of  $\leq 0.050$  mg/l based on mean flows for River Water Bodies classified as having Good/Moderate Status. As shown in the assimilative capacity in section F1 the  $C_{final}$  figure exceeds this slightly. However as stated in section F1 the upstream figure of  $< 0.05$ mg/L for Orthophosphate is only a grab sample, the river was only tested on two occasions over the last five months which indicates that the actual figure for Orthophosphate would more than likely be less than the figure shown of 0.05mg/L. Therefore the septic tank should not have an major negative impact on the status of the river.

The EPA have a number of monitoring stations along the River Lee. Three of these are located at Dromcarra Bridge, Inniscarra Bridge and at Leemount Bridge. Dromcarra Bridge has a Q rating of 4, Inniscarra Bridge has a Q rating of 3 and Leemount Bridge has a Q rating of 4. The objective of the SWRBD report is to restore the water quality.

**Attachment G.2** should contain the most recent programme of improvements and any associated documentation requested under Section G.3 of the application.

| Attachment included | Yes | No |
|---------------------|-----|----|
|                     | √   |    |

**G.3 Impact Mitigation**

Provide details on a programme of improvements to ensure that discharges from the agglomeration will not result in significant environmental pollution.

It is proposed to provide a new treatment plant in Coachford as a Serviced Land Initiative under the Water Services Investment Programme to cater for existing and future increased loads. A number of suitable sites have been identified. The scheme was approved by the DoEHLG in November 2007. Approval for all SLI schemes was withdrawn by the DoEHLG as per Circular L3/09 issued in April 2009. Cork County Council subsequently wrote to the DoEHLG in May 2009 seeking approval to continue to progress this scheme as an SLI. Cork County Council is awaiting a response from the DoEHLG relating to this request.

The provision of a new WWTP with adequate capacity would significantly improve the quality of the discharge.

Based on the assimilative capacity assessments it is not envisaged that there will be deterioration in the chemical or ecological status in the River Lee.

**Attachment G.3** should contain the most recent programme of improvements, including a copy of any approved funding for the project and a timeframe for the completion of the necessary works to take place.

| Attachment included | Yes | No |
|---------------------|-----|----|
|                     | √   |    |

**G.4 Storm Water Overflow**

Provide details on a programme of improvements to ensure that discharges other than the primary and secondary discharges comply with the definition of 'storm water overflow' as per Regulation 3 of the Waste Water Discharge (Authorisation) Regulations, 2007.

An overflow pipe on the sewer network is located approximately 57m west of the entrance to the plant. It consists of 2 no. 225mm pipes which discharge to an open drain in periods of heavy rain. There is no information available in relation to the frequency of discharge to this overflow.

It is not currently known if this storm overflow is to be discontinued when the new WWTP is constructed. However the provision of a new plant is likely to include proposals for the reduction of storm water entering the system.

**Attachment G.4** should contain the most recent programme of improvements, including a copy of any approved funding for the project and a timeframe for the completion of the necessary works to take place.

| Attachment included | Yes | No |
|---------------------|-----|----|
|                     |     | √  |

**SECTION H: DECLARATION**

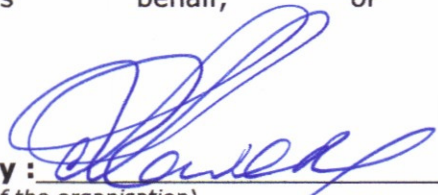
**Declaration**

I hereby make application for a waste water discharge licence/revised licence, pursuant to the provisions of the Waste Water Discharge (Authorisation) Regulations, 2007 (S.I. No. 684 of 2007).

I certify that the information given in this application is truthful, accurate and complete.

I give consent to the EPA to copy this application for its own use and to make it available for inspection and copying by the public, both in the form of paper files available for inspection at EPA and local authority offices, and via the EPA's website.

This consent relates to this application itself and to any further information or submission, whether provided by me as Applicant, any person acting on the Applicant's behalf, or any other person.

**Signed by :**   
(on behalf of the organisation)

**Date :** June 17<sup>th</sup> 09

**Print signature name:** F. Power

**Position in organisation:** D.O.S

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**Attachments Table of Contents:**

| <b>Attachment</b> | <b>Description</b>   |
|-------------------|--|
| A1 Map 1          | General Site Layout 1  |
| A1 Map 2          | General Site Layout 2  |
| B1 Map 3          | Agglomeration Map  |
| B2 Map 4          | Site Location Map  |
| B3 Map 5          | Primary Discharge Location   |
| B4                | Not Applicable   |
| B5 Map 6          | Storm Water Overflow Location  |
| B6                | Not Applicable   |
| B7                | Not Applicable   |
| B8 Map 7          | Site Notice Location   |
| B8                | Notice and Advertisement   |
| B10               | WSIP Programme   |
| B11               | Not Applicable   |
| B12               | Not Applicable   |
| C1 Map 8          | General Site Layout 1  |
| C1 Map 9          | General Site Layout 2  |
| C1 Drawing 1      | Process Flow Diagram   |
| Section D2        | Discharge Points   |
| E2                | Details of Accreditation or Certification of Analysis  |
| Section E3        | Monitoring and Sampling Points   |
| E4                | Monitoring Data  |
| F1                | Laboratory Test Results<br>SWRBD Status Report<br>Upstream and Downstream Sampling Data<br>Zone of Contribution – Inniscarra Waterworks<br>Cryptosporidium Risk Assessment |
| Section F2        | Drinking Water Abstraction Point   |
| G1                | WSIP Programme<br>DoEHLG Approval of Funding<br>DoEHLG Circular L3/09<br>Cork County Council correspondence to DoEHLG  |
| G2                | WSIP Programme<br>Laboratory Test Results  |
| G3                | WSIP Programme   |
| G4                | Not Applicable   |
| Online Data       | Online data submitted to the EPA including Annex   |