Environmental Protection Agency, P.O.Box 3000, Johnstown Castle Estate, County Wexford.

Our Ref.: CB/LARA/221209

22 December 2009

Re: Waste Water Discharge Certificate of Authorisation Application for the Bandon IDA Laragh Agglomeration

Dear Sir/Madam,

Please find enclosed the Waste Water Discharge Certificate of Authorisation Application for the Bandon IDA Laragh Agglomeration

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

- 1 No. signed original hard copy.
- 1 No. copy of the signed original.
- 2 No. CD-ROMs with the documentation in electronic searchable PDF.
- 1 No. CD with Geo-referenced digital drawing files and tabular data templates.

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

A submission of further information will follow to address omissions in the application. These omissions have been highlighted wherever they occur in the application.

Yours faithfully,

Patricia Power Director of Services

# APPLICATION TO THE ENVIRONMENTAL PROTECTION AGENCY FOR A WASTE WATER DISCHARGE CERTIFICATE OF AUTHORISATION



Waste Water Discharge Certificate of Authorisation Application for the agglomeration of **Bandon IDA Laragh** under the Wastewater Discharge Authorisation Regulations S.I. 684 of 2007.

Water Services Name: Cork County Council, Southern Division.

Category of Application: < 500 PE.

Submitted To: Licencing Unit, Environmental Protection Agency, Wexford.

Date Application Lodged: 22<sup>nd</sup> December 2009

This is a draft document and is subject to revision.



# Waste Water Discharge Certificate of Authorisation Application Form

EPA Ref. Nº:	
(Office use only)	

#### **Environmental Protection Agency**

PO Box 3000, Johnstown Castle Estate, Co. Wexford Lo Call: 1890 335599 Telephone: 053-9160600 Fax: 053-9160699 Web: www.epa.ieEmail: info@epa.ie

EPA Export 27-07-2013:00:29:14



### **Tracking Amendments to Draft Application Form**

Version No.	Date	Amendment since previous version	Reason
V. 1.	12/06/2009	N/A	
V.2.	17/06/2009	Delete reference to Design Build and Operate	To accurately reflect the information required for the small schemes programme
		Delete the requirement to provide contact information for the associated waste water treatment plant	To accurately reflect the information required and the scale of the waste water works
		Replace references to the Water Services investment Programme with the Small Schemes Programme	To accurately reflect the information required for the small schemes programme
		Update references to hew legislation  Inclusion the requirement of submit information on private	To reflect changes in legislation
		Inclusion the requirement to submit information within the agglomeration.	To obtain an overview of all discharges within the agglomeration.



Environmental Protection Agency
Application for a Waste Water Discharge Certificate of Authorisation 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 Certificate of Authorisation under the Waste Water Discharge (Authorisation) Regulations, 2007 (S.I. No. 684 of 2007) or for the review of an existing Waste Water Discharge Certificate of Authorisation.

The Application Form **must** be completed in accordance with the instructions and guidance provided in the *Waste Water Discharge Certificate of Authorisation Application Guidance Note.* The Guidance Note gives an overview of Waste Water Certificates of Authorisation, outlines the certification 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.

A valid application for a Waste Water Discharge Certificate of Authorisation must contain the information prescribed in the Waste Water Discharge (Authorisation) Regulations, 2007 (S.I. No. 684 of 2007). Regulation 24 of the Regulations sets out the statutory requirements for information to accompany a Certificate of Authorisation 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 with respect to Regulation 24 requirements, please complete the Regulation 24 Checklist provided in the following web based tool: <a href="http://78.137.160.73/epa\_wwd\_licensing/">http://78.137.160.73/epa\_wwd\_licensing/</a>.

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 Certificates of Authorisation, and for the processing of reviews of such Certificates, appears 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.

An application for a Certificate of Authorisation must be submitted on the appropriate form (available from the Agency website – <a href="http://www.epa.ie/whatwedo/licensing/wwda/">http://www.epa.ie/whatwedo/licensing/wwda/</a>) 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 (under notices provided for in the Regulations) 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 Certificate of Authorisation is an offence under the Waste Water Discharge (Authorisation) Regulations, 2007.

The provision of information in an application for a waste water discharge Certificate of Authorisation 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: <u>Drawings</u>. The following quidelines are included to assist applicants:

- All drawings submitted should be titled and dated.
- All drawings should have a <u>unique reference number</u> and should be signed by a clearly identifiable person.
- All drawings should indicate a scale and the <u>direction of north</u>.
- 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.

Consent of copyright owner reduced for any other use.

#### **NON-TECHNICAL SUMMARY SECTION A:**

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. description should also indicate, where applicable, 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 wastewater 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 Nº A.1

Non-Technical Summary

The IDA Industrial Estate at Laragin is located 4km West of Bandon. The industrial Estate is situated on the R-586 157 regional route connecting Bandon with Cos Dunmanway.

#### The Waste Water Works and the activities carried out therein.

The industrial estate is served by a separate sewerage system. Waste water from this catchment flows directly by gravity to the treatment plant, which is located to the South of the estate.

The WWTP is operated by Cork County Council.

The plant is comprised of the following:

- Inlet
- **Grease Interceptor**
- Screening Chamber
- Compact Activated Sludge Unit 1
- Compact Activated Sludge Unit 2
- Clarifier
- Sludge Storage Tank
- Chemical Phosphorous Removal System
- Outlet

The WWTP currently does not have any sampling regime in place.

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

The population load for the Bandon IDA Laragh Agglomeration arises from the following source:

- Domestic wastewater from the industrial units
- Infiltration

The septic tank does receive any other sludge imported from other municipal waste water sources or septic tanks.

Other potential emissions from the waste water treatment plant include;

- Odour generated from the treatment process No recorded issues to date.
- Noise pollution No recorded Issues to date.

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 final effluent from the WWTP discharges to the River Bandon which is located to the South of the industrial estate. The average outfall from the WWTP is in the order of 73m³/day which is equivalent to a Re of 325.

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

#### **Technology**

Not applicable as there are no current proposals for Bandon IDA Laragh.

#### **Techniques**

Not applicable as there are no current proposals for Bandon IDA Laragh.

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

Not applicable as there are no further measures planned.

#### Measures planned to monitor emissions into the environment.

No ongoing monitoring is currently carried out on the influent and effluent from the WWTP. Cork County Council Environmental Department, Inniscarra has carried out some ambient monitoring in the River Bandon and some monitoring of the effluent as part of this application. The River Bandon is monitored by the EPA upstream and down stream of the discharge point.

Further Information to follow for Section A.

#### **SECTION B: GENERAL**

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

#### **B.1** Agglomeration Details

Name of Agglomeration: Bandon IDA Laragh

#### **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 Certificate of Authorisation application relates. It should have the boundary of the agglomeration to which the Certificate of Authorisation application relates <u>clearly marked in red ink.</u>

Name*:	Cork County Council	
Address:	County Hall	
	Carrigrohane Road	, 112°6.
	Cork	affer
		अप्र. अध्य
Tel:	021 4276891	s of for
Fax:	021 4276321	itie
e-mail:	and the	•

<sup>\*</sup>This should be the name of the Water Services Authority in whose ownership or control the waste water works is vested.

<sup>\*</sup>Where an application is being submitted with behalf of more than one Water Services Authority the details provided in Section B.1 shall be that of the lead Water Services Authority.

	N Company of the Comp
Name*:	Patricia Power 💉
Address:	Director of Services: Operational Water Services
	Floor 5 (Tower)
	County Hall
	Cork
Tel:	021 4285285
Fax:	021 4276321
e-mail:	Patricia.power@corkcoco.ie

<sup>\*</sup>This should be the name of person nominated by the Water Services Authority for the purposes of the application.

#### **Co-Applicant's Details**

Name*:	Not Applicable
Address:	Not Applicable
Tel:	Not Applicable
Fax:	Not Applicable
e-mail:	Not Applicable

<sup>\*</sup>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 Certificate of Authorisation application.

**Attachment B.1** should contain appropriately scaled drawings / maps (≤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.

Name*:	Ray Crowley
Address:	IDA Industrial Estate
	Laragh
	Bandon
	Co. Cork
Grid ref	145071 E, 054836 N
(6E, 6N)	<u>atte</u> t
Level of	Tertiary 35' and a second seco
Treatment	- Se of Forth

<sup>\*</sup>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 (≤A3) of the site boundary and overall site plan, including labelled discharge, monitoring and sampling points. These drawings / maps should also be provided as georeferenced 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>✓</b>	

#### **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.

Discharge to	Surface Water
Type of Discharge	Pipe to River (450mm Dia. Concrete Pipe)
Unique Point Code	SW1LARA
Location	Laragh, Bandon
Grid ref (6E, 6N)	145154 E, 054693 N

**Attachment B.3** should contain appropriately scaled drawings / maps (≤A3) of the discharge point, including labelled monitoring and sampling points associated with the discharge point. These drawings / maps should also be provided as georeferenced 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.

Discharge to	Not Applicable	
Type of Discharge	Not Applicable	
Unique Point Code	Not Applicable	gifter just
Location	Not Applicable	ally ally
Grid ref (6E, 6N)	Not Applicable	atto field

\*Where a septic tank is in existence simultaneous to a package plant within an agglomeration, discharges from the septic tank shall be considered as a secondary discharge.

**Attachment B.4** should contain appropriately scaled drawings / maps (≤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.

Type of	Not Applicable
Discharge	
Unique Point Code	Not Applicable
Location	Not Applicable

Grid ref	Not Applicable
(6E, 6N)	

**Attachment B.5** should contain appropriately scaled drawings / maps (≤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>✓</b>

#### **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.

Name:	Cork County Council
Address:	Planning Department
	County Hall
	Carrigrohane Road
	Cork only and
Tel:	021 4276891 See J. W.
Fax:	021 4867007 mg/g jift
e-mail:	planninginfo@corkcoco.jev kroj

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

has been obtained	$\checkmark$	is being processed	
is not yet applied for		is not required	

Local Authority Planning File Reference №:	Not Available

**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.* 

Attachment included	Yes	No
		✓

#### **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.

Within the SFADCo Area	Yes	No
		✓

#### 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.

Name:	Health Services Executive Southern Region	
Address:	South Lee Local Heath Office	
	Abbeycourt House	
	George's Quay, Cork	
Tel:	021 4965511	
Fax:		
e-mail:	info@hse.ie	

#### B. 8(i) Population Equivalent of Agglomeration

#### TABLE B.8.1 POPULATION EQUIVALENT OF AGELOMERATION

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.

Population Equivalent	325
Data Compiled (Year)	2009
Method	Estimated (Further Information to Follow)

#### Further Information to follow for Section B.8.

#### B.8 (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 waters.

#### Further Information to follow for Section B.8.

#### B.8 (iii) FEES

State the relevant Class of waste water discharge as per Regulation 5, 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 €)
>500	€3000

Appropriate Fee Included	Yes	No
		<b>√</b> *

<sup>\*</sup>please see copy of attached letter sent by registered post to Mr F. Clinton, Programme Manager , Licencing Unit EPA on December 18th 2009

#### **B.9** 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 small schemes programme) 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.

Not Applicable as there is no programme of improvements planned.

**Attachment B.9** should contain the most recent development programme, including a copy of any approved funding to the project and a timeframe for the completion of the necessary works to take place.

Attachment included For Miles	Yes	No
auf con		✓

#### **B.10** 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

**Attachment B.10** should contain a summary of any relevant correspondence issued in relation to a Section 63 notice.

Appropriate Fee Included	Yes	No
		<b>√</b> *

<sup>\*</sup>please see copy of attached letter sent by registered post to Mr F. Clinton, Programme Manager , Licencing Unit EPA on December 18th 2009

#### **B.11** 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

**Attachment B.11** 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
		**



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

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

#### **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 Operational Information Requirements**

The IDA Industrial Estate at Laragh is located 4km West of Bandon. The industrial Estate is situated on the R-586-157 regional route connecting Bandon with Dunmanway.

The industrial estate is served by a separate sewerage system. Waste water from this catchment flows directly by gravity to the treatment plant, which is located to the South of the estate.

The WWTP is operated by Cork County Council.

The plant is comprised of the following:

- Inlet
- **Grease Interceptor**
- Screening Chamber
- Compact Activated Sludge whit 1
- Compact Activated Sludge Unit 2
- Clarifier
- Sludge Storage Tank
- Chemical Phosphorous Removal System
- Outlet

The Waste Water Treatment Plant at the Bandon IDA Industrial Estate Laragh was designed to treat domestic strength wastewater from the industrial units within the industrial estate. Cork County Council granted a licence to discharge trade effluent to waters for this wastewater treatment plant. This licence sets out the maximum daily volume of wastewater that can be discharged from the treatment plant at 73m3/day and the peak hourly discharge rate at 15m3/hr.

The wastewater treatment plant comprises two compact activated sludge treatment units which are installed to operate in parallel.

Each unit comprises an aeration chamber and a separate hopper bottomed settlement chamber. The aeration chambers are fitted with a fine bubble diffused air aeration system fixed to the chamber floor and supplied with air by a common set of blowers. The air blowers are belt driven positive placement units, and they operate on a duty standby basis.

To facilitate the gradual increase in load due to possible additional industrial units sufficient belts have been provided with the blowers to enable their output to be increased to their maximum output. Similarly, the flow splitting chamber upstream

of the aeration chambers enables the plant to be operated at 50-100% its treatment capacity.

#### Further Information to follow for Section C.1

#### 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.

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

Not Applicable, as there is no storm water overflow system in place.

#### 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.

#### C.1.1 Pumping Stations

Not Applicable, as there are no pumping stations in place.

**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
	<b>&gt;</b>	

#### **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 discharges are made or are to be made.

Details of all discharges of waste water from the agglomeration should be submitted the following web based via http://78.137.160.73/epa\_wwd\_licensing/. The applicant should address in particular all discharge points where the substances outlined in Tables 'Emissions to Surface/Groundwaters and 'Dangerous Substances Emissions' 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(i) Discharges to Surface Waters Title

Details of all discharges 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/. Tables 'Discharge Point Details', 'Emissions to Surface/Groundwaters and 'Dangerous Substances Emissions', should be completed for the primary discharge point from the agglomeration and for each secondary discharge point, where relevant. Table 'Discharge Point Details' 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 waste water treatment plant this data should also be provided in response to Section D.1(i).

Supporting information should form **Attachment D.1(i)** 

Attachment included	Yes	No
		✓

#### D.1(ii) Discharges to Groundwater

Details of all discharges of waste water from the agglomeration should be supplied via the following web based link: <a href="http://78.137.160.73/epa wwd licensing/">http://78.137.160.73/epa wwd licensing/</a>. Tables 'Discharge Point Details', 'Emissions to Surface/Groundwaters and 'Dangerous Substances Emissions', should be completed for the primary discharge point from the agglomeration and for **each** secondary discharge point, where relevant. Table 'Discharge Point Details' 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 waste water treatment plant this data should also be provided in response to Section D.1(ii).

Supporting information should form Attachment D.1(ii)

Attachment included	Yes	No
		<b>✓</b>

#### **D.1** (iii) Private Waste Water Treatment Plants

Provide information on all independently owned/operated private waste water treatment plants operating within the agglomeration. Submit a copy of the Section 4 discharge licence issued under the Water Pollution Acts 1977 to 1990, as amended for each discharge.

Not Applicable

#### 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
1 1_05		LA_IVAPIL	CON 2 _ 111 _	KWD_IVAPIE	DESIGNATION	LASTING	NORTHING
SW1LARA	Primary	Cork County	River	River	pNHA	145154	054693
		Council		Bandon			

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. 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.

#### **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 'Discharge Point Details' via the following web based link: <a href="http://78.137.160.73/epa\_wwd\_licensing/">http://78.137.160.73/epa\_wwd\_licensing/</a>.

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 'Discharge Point Details' via the following web based link: <a href="http://78.137.160.73/epa\_wwd\_licensing/">http://78.137.160.73/epa\_wwd\_licensing/</a>.

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 monitoring.

#### **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 discharge and its effect on the receiving environment should be considered.

# **E.2 Monitoring in respect of Bandon IDA Laragh Waste Water Discharge Licence Application Form**

No ongoing monitoring is currently carried out on the influent and effluent from the WWTP. Cork County Council Environmental Department, Inniscarra has carried out some ambient monitoring in the River Bandon and some monitoring of the effluent as part of this application. The River Bandon is monitored by the EPA upstream and down stream of the discharge point.

#### **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 performs 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.

Attachment included	Yes	No
Consent of copyright owner required	<b>√</b>	
	other	
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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:

PT_CD	PT_TYPE	MON_TYPE	EASTING	NORTHING	VERIFIED
SW1	Primary Discharge	S	145080	054829	Y
aSW-1u	Ambient	S	144118	054610	Y
aSW-1d	Ambient	S	147117	054670	Y

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. 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 24(i) of the Waste Water Discharge (Authorisation) Regulations 2007 requires all applicants in the case of an existing discharge 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 24(m) 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
	<b>✓</b>	

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

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

Clear and concise 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) and/or the ambient environmental conditions of the groundwater upgradient and downgradient of any discharges.

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. Impact on Receiving Surface water or Groundwater

- Details of monitoring of the receiving surface water should be supplied via the following web based link: <a href="http://78.137.160.73/epa wwd licensing/">http://78.137.160.73/epa wwd licensing/</a>. Tables 'Monitoring Details', 'Monitoring Test Details', 'Dangerous Substances Monitoring Details' and 'Dangerous Substances Monitoring Test Details' 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 'Monitoring Details', 'Monitoring Test Details', 'Dangerous Substances Monitoring Details' and 'Dangerous Substances Monitoring Test Details'. Monitoring of surface water shall be carried out at not less than two points, one upstream from the discharge location and one downstream.
- Details of monitoring of the receiving ground water should be supplied via the following web based link: <a href="http://78.137.160.73/epa\_wwd\_licensing/">http://78.137.160.73/epa\_wwd\_licensing/</a>. Tables 'Monitoring Details', 'Monitoring Test Details', 'Dangerous Substances Monitoring Details' and 'Dangerous Substances Monitoring Test Details' should be completed for the primary discharge point. Ground water monitoring locations upgradient and down gradient of the discharge point shall be screened for those substances listed in Tables 'Monitoring Details', 'Monitoring Test Details', 'Dangerous Substances Monitoring Details' and 'Dangerous Substances Monitoring Test Details'. Monitoring of ground water shall be carried out at not less than two points, one upgradient from the discharge location and one downgradient.
- For discharges from secondary discharge points Tables 'Monitoring Details', 'Monitoring Test Details', 'Dangerous Substances Monitoring Details' and 'Dangerous Substances Monitoring Test Details' should be completed.
- 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 surface or groundwater.

#### **Existing Environment & Impact of Discharges**

The River Bandon (20B02) is contained within Hydrometric Area 20 and is located entirely in County Cork. The River Bandon rises near Barrboy Mountain and generally flows eastwards towards Inishannon. The river changes direction at Inishannon and flows in a south-easterly direction and discharges into Kinsale Harbour. There is no recent water quality management plan or catchment management plan in place for the River Bandon.

The River Bandon is not designated as salmonid water under the European Communities (Quality of Salmonid Waters Regulations, 1988 (S.I. No. 293/1988)) however it contains good stocks of salmon and sea trout.

The 1998 Phosphorus Regulations set targets for phosphorus levels and biological quality (Q-values) for rivers and lakes. Where water quality is satisfactory it must be maintained and where water quality is unsatisfactory it must be improved. For levels of phosphorus the baseline Q-value determines the median molybdate-reactive phosphorus (MRP) to be achieved.

Water quality in the River Bandon is monitored by the EPA, there are 33 EPA monitoring stations within the catchment. EPA monitoring station 0700 is located approximately 1km up-stream of Bandon IDA WWTP primary discharge point. Water quality at this station has been satisfactory since 1994 with a base Q-value of 4. The monitoring results are shown in **Table F1.1** 

Biological Quality Ratings (Q Values)										
Station   1971   1976   1978   1982   1986   1989   1994   1997   2000   2003   2006										
0700	5	4-5	4	3-4	4 <sup>11</sup> 20 <sup>11</sup> 3-4	4-5	4	4	4	4
0800	5	3	2-3	3	ctio 401 3	3-4	3	3	3	4

collection Table F1.1.

Station 0800 is located 6km down-stream of The Bandon IDA WWTP primary discharge point. Results of the operational monitoring as part of the Water Framework Directive at station 0800 found elevated MRP at the three sampling events in 2007 and nitrate was elevated for one of the three sampling events. All other parameters sampled were within specified limits. Station 0800 has had a moderately polluted status from 1997 – 2003. Water quality at this station was satisfactory in 2006, with a Q-value of 4.

A Biological Quality Rating of Q4 represents satisfactory water quality. Eutrophication is unlikely to occur in water bodies with a biological quality rating of Q4 or higher.

Water quality down-stream in the Upper Bandon Estuary has been classified as Eutrophic by the EPA and is classified as sensitive waters under the Urban Waste Water Treatment Regulations. The River Bandon has been classified as 'at risk' of not achieving 'good' status by 2015 under the Water Framework Directive Article 5 Characterisation (2004). The EPA has recently released Draft Classifications of river waterbody status in which the Bandon Catchment has been classified as being of 'moderate' status.

The Dry Weather Flow at hydrometric station 20003 from the EPA 2008 flow data is recorded as 0.55m3/s and the 95%ile flow is 0.94m3/s, the median flow is recorded as 9.44m3/s.

Schedule 5 of the European Communities Environmental Objectives (Surface Waters) Regulations 2009 (S.I. No. 272 of 2009) sets out "Criteria for Calculating Surface Water Ecological Status and Ecological Potential." These are summarised for river water bodies in **Table F1.2** below.

Biological quality elements	Classification system	Ecological quality ratio  High-Good boundary  Rivers (All Types)	CCC Sampling Data Ambient Monitoring Point aSW-1d
Benthic Quality rating invertebrate fauna (Q-value)		0.85	-
Phytobenthos	Trophic diatom index (TDI)	0.93	-
Thermal	conditions	River water body	CCC Sampling Data
Temperature		Not greater than 1.5°C rise in ambient temperature outside the mixing zone	-
Oxygenatio	on conditions	River water body	CCC Sampling Data
Biochemical Oxygen Demand (BOD) (mgO <sub>2</sub> /l)		Good status≤1.3 (mean) or ≤2.2(95%ile)	<1
Dissolved oxygen lower limit Dissolved oxygen upper limit		95%ile>80% Saturation 95%ile<120% Saturation	-
Acidification Status		River Water Body	CCC Sampling Data
pH (individual values)		Soft Water 4.5<	7.4
Nutrient conditions		River Water body	CCC Sampling Data
Total Ammonia (mg N/l)		Good status ≤ 0.065(mean) or ≤ 0.090 (95%ile)	-
Molybdate Reactive Phosphorus (MRP) (mg P/I)		Good status≤0.035(mean) or ≤0.075(95%ile)	<0.05 (Limit of Detection)

Table F1.2 Criteria for Calculating Surface Water Ecological Status and Ecological Potential

 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.

Cork County Council have monitored for the main polluting substances, as part of this application, as defined in the Dangerous Substances Regulations, 2001 (S.I. No. 12/2001). The results are presented in **Attachment E.** 

In addition Cork County Council conducted a screening assessment for Dangerous Substances in 2002 as part of the Measures Report under the Water Quality (Dangerous Substances) Regulations, 2001. The River Bandon at Inishannon Bridge was screened as part of the assessment and the baseline quality was found to be satisfactory for all parameters screened.

 In circumstances where drinking water abstraction points exist downstream/down gradient 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.

Water is abstracted down-stream of the WWTP at Inishannon. The location of the abstraction point is approximately 10km down-stream of the outfall. The grid reference is 153484E, 057535N. The volume abstracted per day is approximately 9,800m3/day.

Specific measures are not taken to ensure that discharges from the wastewater works will not have a significant effect on faecal coliforms, salmonella and protozoan pathogen numbers. The water treatment plant at Inishannon treats water for the Inishannon Water Supply Scheme which consists of coagulation, upward flow clarification, rapid gravity sand filtration, fluoridation and chlorination.

Water quality is monitored at the waterworks intake for the Cork County Council drinking water plant by Cork County Council on a quarterly programme as part of the Abstraction Directive. The intake location is also monitored currently on a weekly basis by Cork County Council for both Cryptosporidium and Giardia and the results are acceptable.

- 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)

There are three proposed Natural Heritage Areas (pNHAs) located in the vicinity of the Bandon IDA wastewater discharge point. The WWTP discharges directly to the pNHA Bandon Valley West of Bandon (site code 001034). The WWTP primary discharge is located approximately 7.25km up-stream of the pNHA Bandon Valley Above Inishannon (Site Code: 001740) and approximately 13.5km up-stream of the Bandon Valley Below Inishannon (Site Code: 001515). A copy of the site synopses for Bandon Valley West of Bandon and Bandon Valley Above Inishannon are included in Attachment F1.

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

The objectives of the Water Framework Directive (WFD) are to protect all high status waters, prevent further deterioration of all waters and to restore degraded surface and ground water status by 2015. Cork County Council monitors the inlet and outlet flows from Bandon IDA WWTP to ensure compliance with the relevant standards. Up-stream and down-stream locations are also monitored.

#### Birds Directive 79/409/EEC

The directive aims to conserve and manage populations of wild birds throughout Europe partly through the designation of Special Protection Areas (SPA) for birds and their habitats. The discharge point is not located within an SPA.

#### Groundwater Directives 80/68/EEC and 2006/18/EC

Not applicable as there are no emissions to groundwater.

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

The Urban Waste Water Treatment Regulations, (S.I. 254 of 2001) gives effect to provisions of the Urban Wastewater Treatment Directive (91/271/EEC). The 2001 Irish Regulations in relation to the collection and treatment of urban wastewater.

Article 7 (a) states that 'Member States shall ensure that, by 31 December 2005, urban waste water entering collecting systems shall before discharge be subject to appropriate treatment as defined in Article 2 (9) in the following cases:

- for discharges to fresh-water and estuaries from agglomerations of less than 2 000 p.e.,
- for discharges to coastal waters from agglomerations of less than 10,000 p.e'.

#### Habitats Directive 92/43/EEC

There are no Special Areas of Conservation (SACs) or Special Protection Areas (SPAs) under the Habitats Directive in the vicinity of the waste water discharge.

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

There are no designated bathing waters in the vicinity of the discharge.

#### Shellfish Waters Directive (79/923/EEC)

There are no waters designated for shellfish in the vicinity of the discharge.

There was no modelling study conducted for the discharges from Bandon IDA WWTP.

#### Further Information to follow for Section F.1

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

Mass Balance Equation for Orthophosphates:

Median flow of River (SWRBD) = 9.6176m<sup>3</sup>/sec Median  $OPO_4$ -P in River (upstream) = 0.05mg/IAverage volume of discharge = 0.00085m<sup>3</sup>/sec Median value for  $OPO_4$ -P in discharge = 3.0mg/l

$$C_{final} = (9.6176 \times 0.05) + (0.00085 \times 3.0)$$
  
(9.6176 + 0.00085)

 $C_{final} = 0.0502 \text{mg/l OPO}_4-P$ 

The increase in Orthophosphate due to the discharge of Bandon IDA Laragh WWTP is 0.0002 mg/l.

Mass Balance Equation for BOD:

Flow of River  $(95\%ile) = 1.4576m^3/sec$ tion buildeses only, any other use of the building of the buil Median BOD in River (upstream) = 1.0mg/l Average volume of discharge = 0.00085m<sup>3</sup>/sec Median value for BOD in discharge = 35.0mg/l

$$C_{final} = (1.4576 \times 1.0) + (0.00085 \times 35)$$
  
(1.4576 + 0.00085)

 $C_{final} = 1.02 \text{mg/l BOD}$ 

The increase in BOD due to the discharge of Bandon IDA Laragh WWTP is 0.02mg/l.

Mass Balance Equation for Suspended Solids:

Flow of River (95%ile) = 1.4576m<sup>3</sup>/sec Median SS in River (upstream) = 2.5 mg/l Average volume of discharge = 0.00085m<sup>3</sup>/sec Median value for SS in discharge = 35.0mg/l

$$C_{final} = (1.4576 \times 2.5) + (0.00085 \times 35)$$
  
(1.4576 + 0.00085)

 $C_{final} = 2.519$ mg/l Suspended Solids

The increase in Suspended Solids due to the discharge of Bandon IDA Laragh WWTP is 0.019mg/l.

Mass Balance Equation for Total Phosphates:

Median Flow of River (SWRBD) = 9.6176m<sup>3</sup>/sec Median TP-P in River (upstream) = 0.05mg/l Average volume of discharge = 0.00085m<sup>3</sup>/sec Median value for TPO4-P in discharge = 3.0mg/l

$$C_{final} = (9.6176 \times 0.05) + (0.00085 \times 3.0)$$
  
(9.6176 + 0.00085)

 $C_{final} = 0.0502$ mg/l Total Phosphates

The increase in Total Phosphates due to the discharge of Bandon IDA Laragh WWTP is 0.0002mg/l.

Mass Balance Equation for Total Nitrogen:

Flow of River (95%ile) = 1.4576m³/sec Median Total Nitrogen in River (upstream) = 2.63mg/l Average volume of discharge = 0.00085m³/sec Median value for Total Nitrogen in discharge = 15.0mg/l

 $C_{\text{final}} = \underbrace{(1.4576 \times 2.63) + (0.00085 \times 15)}_{(1.4576 + 0.00085)}$ 

 $C_{final} = 2.637 mg/l$  Total Nitrogen

The increase in Total Nitrogen due to the discharge of Bandon IDA Laragh WWTP is 0.007mg/l.

Mass Balance Equation for Sulphates:

Flow of River (95%ile) = 1.4576m³/sec

Median Sulphates in River (upstream) = 30.0mg/l

Average volume of discharge = 0.00085m³/sec

Median value for Sulphates in discharge = 30.0mg/l

 $C_{\text{final}} = \underbrace{(1.4576 \times 30) + (0.00085 \times 30)}_{(1.4576 + 0.00085)} + \underbrace{(1.4576 \times 30) + (0.00085 \times 30)}_{\text{periodical property}}$ 

 $C_{final} = 30.0 \text{mg/l Sulphates}$ 

The increase in Sulphates due to the discharge of Bandon IDA Laragh WWTP is 0.0mg/l.

Mass Balance Equation for Ammonia-N:

Flow of River (95%ile) = 1.4576m³/sec Median Ammonia in River (upstream) = 0.1mg/l Average volume of discharge = 0.00085m³/sec Median value for Ammonia in discharge = 0.4mg/l

 $C_{\text{final}} = \underbrace{(1.4576 \times 0.1) + (0.00085 \times 0.4)}_{(1.4576 + 0.00085)}$ 

 $C_{final} = 0.1002 \text{mg/l Total Ammonia}$ 

The increase in Ammonia due to the discharge of Bandon IDA Laragh WWTP is 0.0002mg/l.

 This section should also contain details of any modelling of discharges from the agglomeration. Any other relevant information on the receiving environment should be submitted as **Attachment F.1.**

Attachment included	Yes	No
	✓	

#### 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.

ABS_CD	AGG_SERVE D	ABS_VOL	PT_CD	DIS_DS	EASTING	NORTHING	VERIFIED
SW_Bandon 229_Bandon_ 1Lower	Inishannon	8523	-	10000	153458	57545	N

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

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.

#### 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 (2006/113/EC).

Not Applicable as there is no programme of improvements planned.

**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.

Attachment included	Yes	No
sent of the second of the seco		<b>✓</b>

# **G.2** Compliance with the European Communities Environmental Objectives (Surface Waters) Regulations 2009

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 European Communities Environmental Objectives (Surface Waters) Regulations 2009 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 previously identified as the principal sources of pollution under the Phosphorous Regulations (S.I. No. 258 of 1998).

Not Applicable as there is no programme of improvements planned.

**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.

Not Applicable as there is no programme of improvements planned.

**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 Overflows

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.

Not Applicable as there is no programme of improvements planned.

**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	ion pariett	Yes	No
	inspectowine		✓
	FOLYING		

#### SECTION H: DECLARATION

#### **Declaration**

I hereby make application for a waste water discharge Certificate of Authorisation/revised Certificate of Authorisation, 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.

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Signed by :	Durgediile	Date:
(on behalf of the organisation)	gection to the	
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Position in organisation:	•	
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#### **SECTION I: JOINT DECLARATION**

#### **Joint Declaration Note1**

I hereby make application for a waste water discharge Certificate of Authorisation /revised Certificate of Authorisation, 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.

<u>Lead Authority</u>	Seo.
Signed by :	Odi <sup>ert</sup> Date :
(on behalf of the organisation)	Orly, sary
Print signature name:	stroses die
sciton	Ref.
Position in organisation:	
Co-Applicants	
Signed by :	Date :
(on behalf of the organisation)	
Print signature name:	
Signed by: (on behalf of the organisation)  Print signature name:  Position in organisation:  Co-Applicants  Signed by: (on behalf of the organisation)  Print signature name:  Position in organisation:	
Signed by :	Date :
(on behalf of the organisation)	
Print signature name:	
Position in organisation:	

**Note 1**: In the case of an application being lodged on behalf of more than a single Water Services Authority the following declaration must be signed by all applicants.