

This is a draft document and is subject to revision.



Waste Water Discharge Certificate of Authorisation Application Form

EPA Ref. N^o:
(Office use only)

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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	<p>Delete reference to Design Build and Operate</p> <p>Delete the requirement to provide contact information for the associated waste water treatment plant</p> <p>Replace references to the Water Services investment Programme with the Small Schemes Programme</p> <p>Update references to new legislation</p> <p>Inclusion of the requirement to submit information on private WWTPs within the agglomeration.</p>	<p>To accurately reflect the information required for the small schemes programme</p> <p>To accurately reflect the information required and the scale of the waste water works</p> <p>To accurately reflect the information required for the small schemes programme</p> <p>To reflect changes in legislation</p> <p>To obtain an overview of all discharges within the agglomeration.</p>

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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: http://78.137.160.73/epa_wwd_licensing/

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 – <http://www.epa.ie/whatwedo/licensing/wwda/>) 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: 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, 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 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**

Non-Technical Summary

Shanagarry and the coastal resort of Garryvoe are situated approximately 14 kilometres southeast of Midleton, on the R-632-55 regional route connecting Shanagarry and Castlemartyr. In the overall strategy of this Local Area Plan, Shanagarry / Garryvoe is designated as a Village and important holiday resort within East Cork. Garryvoe has experienced significant development in recent years.

The Waste Water Works and the activities carried out therein.

The sewage network in Garryvoe generally follows the path of the R-632-55. It runs from East to West, following the coastline and also from North to South. Waste water flows by gravity to the septic tank, which is underneath the public toilets located beside the public car park for the Beach. It then discharges into Ballycotton Bay. The network is a combined sewer system.

Garryvoe septic tank is currently operated by Cork County Council.

The system is comprised of the following;

- Inlet
- Septic Tank
- Dilution Chamber
- Outlet

When the tank was built in the 1960s the PE contributing to it was far less than at present. The current PE contributing to the septic tank is approximately 466. The passage of sewage through a septic tank helps in the removal of suspended solids but there is very little biological activity and the removal of BOD is not significant.

The septic tank currently does not have any sampling regime in place.

Garryvoe Village is included in the Shanagarry/Garryvoe/Ballycotton Sewerage Scheme, which is included in the Water Services Investment Programme 2007-2009. Cork County Council is currently awaiting departmental approval for funding to proceed with the Ballycotton element of this Scheme. This element is to be designed and built to allow for expansion in the future. It is proposed to procure the treatment plant under a design, build, operate contract. The operator will be obliged to meet the standards set out in the Urban Waste Water Treatment Regulations and it is likely that an appropriate sampling regime will be put in place.

The sources of emissions from the waste water works.

The population load for the Garryvoe agglomeration arises from the following sources:

- Domestic Population
- Commercial Premises
- Infiltration

The sewage from all non-domestic premises is collected via the existing sewer network and is treated in conjunction with the domestic waste at the Septic tank. Garryvoe septic tank does not 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 discharge is to Ballycotton Bay which is located to the South of the village. The average outflow from the septic tank is in the order of 105m³, which is equivalent to a PE of 466. The proposed plant will be initially designed to cater for a PE of 1200, with an allowance for future expansion up to 3200 PE to accommodate the treatment of wastewater from Shanagarry and Garryvoe.

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

Technology

The new WWTP will include the following elements;

- Grit Removal and Screening
- Storm Holding Tank
- Inlet Flow Measurement Chamber
- Extended Aeration Tanks
- Clarifier

- Sludge Picket-Fence Thickener
- Final Effluent Flow Measurement Chamber
- UV Channel
- Control House
- Odour Control Units

Techniques

The new WWTP shall be operated and maintained in accordance with best practice and any performance requirements stipulated in the Employer's Requirements.

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 be upgraded with the construction of the new WWTP. The treatment capacity, the discharge quality and control systems will be improved to ensure that no significant pollution is caused.

It is likely that under the DBO contract for the new WWTP, a Performance Management system will be required. Such a system would provide a uniform approach to dealing with management issues, including procedures for dealing with plant operation and in particular for dealing with emergencies or failure to meet treated effluent standards.

Failure to meet the specified treated effluent standards may result in financial penalties to the operating contractor. As a result, the risk of environmental pollution from the treatment plant should be reduced.

Measures planned to monitor emissions into the environment.

No sampling is currently carried out on the influent or effluent. It is likely that under the Employers Requirements for Operation and Maintenance the Contractor will be obliged to implement in full, the requirements of a Performance Management System. In providing this service, the Contractor would monitor the waste water treatment plant assets and operation, which would include undertaking sampling, monitoring and analysis of the wastewater and Sludge. County Council Environmental Department and the EPA monitor Water Quality in Garryvoe Beach. Water quality in Ballycotton Bay is not monitored by the EPA. Youghal Harbour is the nearest coastal water body monitored by the EPA.

SECTION B: GENERAL

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

B.1 Agglomeration Details

Name of Agglomeration: Garryvoe
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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 clearly marked in red ink.

Name*:	Cork County Council
Address:	County Hall
	Carrigrohane Road
	Cork
Tel:	021 4276891
Fax:	021 4276321
e-mail:	

*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.

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

*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

*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 ($\leq A3$) 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.

Name*:	Jack McCarthy
Address:	Garryvoe Ladysbridge Castlemartyr Co. Cork
Grid ref (6E, 6N)	199912 E, 067413 N
Level of Treatment	Primary

*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.

Discharge to	Surface Water
Type of Discharge	400mm Dia. HDPE Pipe to Sea, with Tide Release Valve.
Unique Point Code	SW1GVOE
Location	Garryvoe Lower, Garryvoe
Grid ref (6E, 6N)	200130 E, 067359 N

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.

Discharge to	Not Applicable
Type of Discharge	Not Applicable
Unique Point Code	Not Applicable
Location	Not Applicable
Grid ref (6E, 6N)	Not Applicable

*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 ($\leq A3$) 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.

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

Grid ref (6E, 6N)	Not Applicable
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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.

Name:	Cork County Council
Address:	Planning Department
	County Hall
	Carrigrohane Road
	Cork
Tel:	021 4276891
Fax:	021 4867007
e-mail:	planninginfo@corkcoco.ie

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

has been obtained	✓	is being processed	
is not yet applied for		is not required	

Local Authority Planning File Reference N^o:	Not Available
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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:	North 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 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.

Population Equivalent	466
Data Compiled (Year)	2009
Method	House Counts and Population Data

Domestic Contribution

There are 80 existing dwellings within the agglomeration boundary served by the public sewer. 48 dwellings, 2 retail units and an associated WWTP were granted permission under Planning File Reference No. 06/7273. 25 of these have been built with the WWTP Treated effluent from a these 25 dwellings is discharged to the Septic Tank. An additional 62 caravans discharge to the septic tank.

Non Domestic Contribution

The non domestic contribution is made up of 1 Shop, the Caravan Office and Accommodation Block and the treated effluent from the Hotel.

Pending Development

A further 25 dwellings 14 serviced sites and 2 retail units have been granted planning permission within the agglomeration boundary. However 23 of these dwellings, the 14 serviced sites and the 2 retail units are to be provided with their own WWTPs. Planning File Reference No. 08/4028 and 09/5554 refers to the 14

serviced sites and their associated WWTP. Planning file reference No. 06/7273 refers to the remaining 23 dwellings and 2 retail units, which have not been built yet. Therefore only 2 dwellings which have been granted planning permission will be discharging directly to the Septic Tank.

The total number of dwellings, existing and future is 82. Assuming that there are c2.8 persons per household (CSO Data), this gives a PE of 230. Taking the worst case scenario of full occupancy in the caravan park gives us an additional 62 households within the agglomeration boundary. Assuming that there are c2.8 persons per household, this gives a further PE of 174. Assuming that the non-domestic contribution is 5% of the domestic, adds another PE of 20. This brings the total PE to 424. Finally an additional 10% should be added to the current figure over what already has been allowed, to account for further future development. This adds an additional PE of 42, resulting in a PE of 466.

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.

The PE of 466 obtained in the previous section includes the following; A PE of 6 from dwellings that may connect to the public sewer during the course of the licence (Planned), A PE of 42 which is an additional 10% allowance for future development. This allows for a total potential increase of up to 48PE during the course of the licence.

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
		✓*

*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.

Garryvoe Village is included in the Shanagarry/Garryvoe/Ballycotton Sewerage Scheme, which is included in the Water Services Investment Programme 2007-2009. Cork County Council is currently awaiting departmental approval for funding to proceed with the Ballycotton element of this Scheme. This element is to be designed and built to allow for expansion in the future. It is proposed to procure the treatment plant under a design, build, operate contract. This proposal has been granted part 8 planning approval.

Attachment B.9 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.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.

Attachment included	Yes	No
	✓	

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.

Foreshore Licence file reference No. MS51/8/432, effective from the 8/3/1968, for the "laying using and maintaining an outfall sewer pipe", is currently in place.

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
		✓

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 Operational Information Requirements

Shanagarry and the coastal resort of Garryvoe are situated approximately 14 kilometres southeast of Midleton, on the R-632-55 regional route connecting Shanagarry and Castlemartyr. In the overall strategy of this Local Area Plan, Shanagarry / Garryvoe is designated as a Village and important holiday resort within East Cork. Garryvoe has experienced significant development in recent years.

The sewage network in Garryvoe generally follows the path of the R-632-55. It runs from East to West, following the coastline and also from North to South. Waste water flows by gravity to the septic tank, which is underneath the public toilets located beside the public car park for the Beach. It then discharges into Ballycotton Bay. The network is a combined sewer system.

Garryvoe septic tank is currently operated by Cork County Council.

The system is comprised of the following;

- Inlet
- Septic Tank
- Dilution Chamber
- Outlet

Primary Treatment

Under normal operating conditions all of the influent enters the septic tank, which has a capacity of 47m³. The capacity in terms of PE has been estimated at 250. Here the heavy solids settle to the bottom of the tank and are stored for collection. The effluent then flows into the dilution chamber. Here it is mixed with fresh water from the adjacent Ballylongane River and then it falls by gravity to the primary discharge point. The septic tank provides only preliminary treatment. The passage of sewage through a septic tank helps in the removal of suspended solids but there is very little biological activity and the removal of BOD is not significant.

The septic tank was built in the 1960s with a capacity of 250PE. This is much less than the current PE of 466. The septic tank provides only preliminary treatment. The passage of sewage through a septic tank helps in the removal of suspended solids but there is very little biological activity and the removal of BOD is not significant. The septic tank is badly overloaded and is not operating efficiently. It is highly unlikely that the effluent meets the required standard.

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.1.2 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 Storm Water Overflows

Not Applicable as there are no Storm Water Overflows associated with the agglomeration.

C.1.2 Pumping Stations

Not Applicable as there are no pumping stations within the agglomeration.

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
		✓

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 via the following web based link: 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

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: 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(ii).

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

Attachment included	Yes	No
		✓

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.

There is 1 private WWTP with a Section 4 discharge licence in the Garryvoe agglomeration. This private WWTP serves the Garryvoe Hotel. This is an EnviroPak LRD300 WWTP with a design capacity of 300PE.

The Garryvoe Hotel WWTP is comprised of the following;

- Inlet
- Primary Settlement Tank
- Aeration Tank
- Secondary Settlement Tank
- Excess Sludge Tank
- Outlet to Existing Foul Sewer

This WWTP discharges to the existing Septic Tank.

A Location map and the discharge licence are included in **Attachment D**

D.2 Tabular Data on Discharge Points

Applicants should submit the following information for each discharge point:

Table D.2:

PT_CD	PT_TYP E	LA_NAME	RWB_TYPE	RWB_NAME	DESIGNATION	EASTING	NORTHING
SW1GVOE	Primary	Cork County Council	Coastal	Ballycotton Bay	pNHA, SPA	200130	067359

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.

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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 'Discharge Point Details' via the following web based link: 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 'Discharge Point Details' via the following web based link: 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 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 Garryvoe Waste Water Discharge Licence Application Form

There is no monitoring system in place for the septic tank. For the purposes of this application samples were collected at the outlet and tested by the Environmental Directorate of Cork County Council.

County Council Environmental Department and the EPA also monitor Water Quality in Garryvoe Beach. Water quality in Ballycotton Bay is not monitored by the EPA. Youghal Harbour is the nearest coastal water body monitored by the EPA.

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
	✓	

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	199918 E	067423 N	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
	✓	

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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.

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: http://78.137.160.73/epa_wwd_licensing/. 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: http://78.137.160.73/epa_wwd_licensing/. 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.

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

Existing Environment and Impacts of Discharges

Garryvoe village is located within Hydrometric area 19, however the discharges are to Ballycotton Bay (Water Body Code IE_SW_040_0000), the adjoining coastal area. Ballycotton Bay has "Good" status and has been classified as "Not at Risk" of achieving "good" status by 2015 under the Water Framework Directive Article 5 Characterisation (2004).

Water quality in Ballycotton Bay is not monitored by the EPA. Youghal Harbour is the nearest coastal water body monitored by the EPA, where the water quality is classed as unpolluted.

Foreshore Licence & Current Discharge Standards

There is a foreshore licence for Garryvoe the reference number is MS51/8/432. The licence was issued to Cork County Council for the 'Laying, using and maintaining an outfall sewer pipe'.

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 coastal waters in **Table F1.1 below**.

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Biological quality elements	Classification system	Coastal water body	
		Ecological quality ratio	Good-moderate boundary
		Good-moderate boundary	Chlorophyll ($\mu\text{g/l}$)
Phytoplankton	Phytoplankton biomass (Chlorophyll)	0.33	5.0 (median value) and 10.0 (90 percentile value)
	Phytoplankton composition	0.43	10.0 (median value and 20 (90 percentile value) Percentage of single taxa counts above thresholds 39
Macroalgae	Rocky shore reduced species list multimetric system	Good-moderate boundary	
	Opportunistic macroalgae multimetric system	0.80	
Thermal conditions		Coastal water body	
Temperature	Not greater than 1.5°C rise in ambient temperature outside the mixing zone		
Oxygenation conditions		Coastal water body	
Dissolved oxygen lower limit	(35psu) 95%ile >80% Saturation		
Dissolved oxygen upper limit	(35psu) 95%ile >120% Saturation		
Nutrient conditions		Coastal water body	
Dissolved Inorganic Nitrogen (mg N/l)	(0 psu) ≤ 2.6 mg N/l (34.5psu) ≤ 0.25 mg N/l		

Table F1.1 Criteria for Calculating Surface Water Ecological Status and Ecological Potential

Ecological Reports and Hydrodynamic and Dispersion Modelling

The Ecological Report and The Hydrodynamic and Dispersion Modelling of Ballycotton Bay Co. Cork, for the proposed Shanagarry, Garryvoe, Ballycotton Sewerage Scheme have been included in **Attachment F**. These should have relevance, given the close proximity of the proposed outfall to the existing primary discharge point (3.3km).

The primary discharge point is located within the Ballycotton, Ballynamona and Shanagarry pNHA (Site Code 000076). This discharge point is also located approximately 3.2km away from the Ballycotton Islands pNHA (Site Code 001978).

- 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 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.

Not Applicable, as this is a coastal area with no drinking water abstraction points.

- 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/EEC¹ 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/EEC²;

¹Council 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)

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

Assessment of Relevant Legislation Applicable to Garryvoe Discharge

The following assesses the relevant European Union Directives and Irish Statutory Legislation that is applicable to the discharge standards at Garryvoe.

- 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 (Not applicable),
- Drinking Water Directives 80/778/EEC (Not applicable),
- 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

Council Directive 2006/11/EC recognises the need for action to be taken by member states to protect the aquatic environment from pollution, in particular that caused by certain persistent, toxic and bioaccumulable substances. The discharge from Garryvoe is primarily from domestic sources. Cork County Council has 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**.

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 carried out some limited monitoring on the outlet flows to measure compliance against the relevant standards. A copy of the Water Quality Management Plan for this area has been included in **Attachment F**.

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 primary discharge point is located within Ballycotton Bay SPA (site code 004022). The site synopsis for this SPA is included in **Attachment F**.

Groundwater Directives 80/68/EEC & 2006/118/EC

Not Applicable as there are no discharges to groundwater.

Drinking Water Directives 80/778/EEC

Not Applicable, as this is a coastal area with no drinking water abstraction points.

The Urban Waste Water Treatment Directive 91/271/EEC and Amendment Directive 98/15/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 PE,

- for discharges to coastal waters from agglomerations of less than 10,000 PE.”

Appropriate treatment is described as that which will allow compliance with other relevant Directives.

The total PE of the Garryvoe agglomeration is 466.

Habitats Directive 92/43/EEC

The aim of this Directive is to contribute towards ensuring bio-diversity through the conservation of natural habitats and of wild fauna and flora. While there are no SACs designated in location of the discharge, Ballycotton Bay is designated as an SPA (site code 004022). A site synopsis for the designation is included in **Attachment F**. The primary discharge point is located within the Ballycotton, Ballynamona and Shanagarry pNHA (Site Code 000076). This discharge point is also located approximately 3.2km away from the Ballycotton Islands pNHA (Site Code 001978).

Bathing Water Directive 79/160/EEC

Council Directive (76/160/EEC 1975), concerning bathing water quality and the associated Bathing Water Regulations (S.I. No 177 of 1998) lay down quality requirements for inland and coastal waters designated bathing areas. The quality standards rely predominantly on microbiological parameters. The purpose is to ensure that bathing water quality is maintained and if necessary improved so that it complies with specified standards designated to protect health and the environment.

Water Quality in the Beach at Garryvoe is monitored by Cork County Council and the EPA to check compliance with the Quality of Bathing Water Regulations and its relevant amendments to the Blue Flag Beach Scheme, as Garryvoe is a designated Blue Flag Beach. The Bathing Water and Blue Flag Beach Water Quality Standards are presented below in **Table F1.2**. The Water Quality Results for the Beach at Garryvoe are presented in **Table F1.3**.

Parameter	Total Coliforms (No/100ml)	Faecal Coliforms (No/100ml)	Faecal Streptococci (No/100ml)
Bathing Water Standards	80% < 5000 95% < 10000	80% < 1000 95% < 2000	95% < 300
Blue Flag Standards	500	100	100

Table F1.2 Bathing Water and Blue Flag Beach Water Quality Standards

Parameters	Units	Results
		Garryvoe Beach 25/08/09
Total Coliforms	No/100ml	9
Faecal Coliforms	No/100ml	2
Faecal Streptococci	No/100ml	0

Table F1.3 Water Quality in the Beach at Garryvoe

For the 2009 bathing season, the Beach at Garryvoe has generally achieved good water quality status and complied with the EU guide and mandatory values. This area has achieved good water quality status for the past six years.

[EU Shellfish Waters Directive \(79/923/EEC\); and EU Directive on Health Conditions and the Placing on the Market of live Biovalve Molluscs \(91/67/EEC\) and associated amendments](#)

There are two main EU directives relating to Shellfish Waters. These are the Shellfish Directives (79/923/EEC) as implemented by the Quality of Shellfish Waters Regulations 2006 (S.I. No 268 of 2006), and the Directive on Health Conditions and the placing on the market of Live Bivalve Molluscs (91/67/EEC) and its associated amendments.

The Shellfish Waters Directive is designed to put in place concrete measures to protect waters, including shellfish waters, against pollution and to safeguard certain shellfish populations from various harmful consequences, resulting from the discharge of pollutant substances into the sea. The Directive applies to the aquatic habitat of bivalve and gastropod molluscs only.

The Directive sets physical, chemical and microbiological water quality requirements that designated shellfish waters must either comply with ('mandatory' standards) or endeavour to meet ('guideline' standards). The parameters for testing are pH, temperature, colouration (after filtration), suspended solids, salinity, dissolved oxygen, petroleum hydrocarbons, organohalogenated substances, metals (dissolved), faecal coliforms and substances affecting the taste of the shellfish, faecal coliforms are regarded as one of the most significant parameters. Waters must meet certain mandatory values based on the monitoring regime. Designated waters must conform to the set limit values for the certain parameters within six years of designation.

The outfall from Garryvoe septic tank does not discharge to designated shellfish waters. The closest designation is at Ballymacoda Bay which is located approximately 13km from the discharge point. This designation is detailed in **Table F.1.4**. A map showing the location of the shellfish designation has been included in **Attachment F**.

Production Area	Boundaries	Bed Name	Species	Previous Classifications	Current Classifications
Ballymacoda Bay	Knockadoon Head to Knockaverry	All Beds	Oysters	B	B

Table F.1.4 Designation Bivalve Molluscs Production Areas in Ireland – October 2006

In accordance with the Live Bivalve Molluscs (Production Areas) designation 2006 and Council Directive 91/492/EEC, Ballymacoda Bay has a category B status which means that shellfish from this area have to be treated in a purification centre or a relay bed before they can be placed on the market for human consumption. The water quality standards for shellfish in Category B waters is summarised in **Table F.1.5**. The status of the shellfish waters is monitored on a monthly basis by the National Marine Institute.

Category of Waters	Faecal Coliforms / 100g of Flesh	Compliance of Samples	Further Information
A- Immediate Human Consumption	< 300	100% < 300	Not Required
B- Human Consumption After Treatment	300 – 6,000	90% < 6,000	Purification After Relaying
C- Human Consumption After Treatment	6,000 – 60,000	100% < 60,000	Relaying for long period – Intensive Purification.

Table F.1.5 Requirements for Faecal Coliform levels for Live Bivalve Molluscs in Accordance with Directive 91/492/EEC

- 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_SERVED	ABS_VOL	PT_CD	DIS_DS	EASTING	NORTHING	VERIFIED
Abstraction Code	Agglomeration served	Abstraction Volume in m ³ /day	Point Code Provide label ID's	Distance Downstream in meters from Emission Point to Abstraction Point	6E-digit GPS Irish National Grid Reference	6N-digit GPS Irish National Grid Reference	Y = GPS used N = GPS not used

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).

Garryvoe Village is included in the Shanagarry Garryvoe/Ballycotton Sewerage Scheme, which is included in the Water Services Investment Programme 2007-2009. Cork County Council is currently awaiting departmental approval for funding to proceed with the Ballycotton element of this Scheme. This element is to be designed and built to allow for expansion in the future. It is proposed to procure the treatment plant under a design, build, operate contract. This proposal has been granted part 8 planning approval.

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
		✓

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 The Water Quality Standards for Phosphorous Regulations (1998) only covers rivers and lakes, not coastal areas.

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.

The proposed plant will be initially designed to cater for a PE of 1200, with an allowance for future expansion up to 3200 PE to accommodate the treatment of wastewater from Shanagarry and Garryvoe and will include the following elements;

- Grit Removal and Screening
- Storm Holding Tank
- Inlet Flow Measurement Chamber
- Extended Aeration Tanks
- Clarifier
- Sludge Picket-Fence Thickener
- Final Effluent Flow Measurement Chamber
- UV Channel
- Control House
- Odour Control Units

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.

A Storm Holding Tank will be provided as part of the proposed plant. The Storm water will discharge to Ballycotton Bay via the new 350mm dia. Outfall.

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 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.

Signed by : _____
(on behalf of the organisation)

Date : _____

Print signature name: _____

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.

Lead Authority

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

Print signature name: _____

Position in organisation: _____

Co-Applicants

Signed by : _____ **Date :** _____
(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.