# Comhairle Contae Chorcaí Cork County Council

Halla an Chontae, Corcaigh, Éire. Fón: (021) 4276891 • Faics: (021) 4276321 Suíomh Gréasáin: www.corkcoco.ie County Hall, Cork, Ireland. Tel: (021) 4276891 • Fax: (021) 4276321 Web: www.corkcoco.ie



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

Environmental Protection Agency Erensing f & NOV 2010 Initials

Our Ref.: CB/BSPT/221209

22 December 2009

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Re: <u>Waste Water Discharge Certificate of Authorisation Application for the</u> Ballinspittle & Garrettstown Agglomeration කර්දාහා

Dear Sir/Madam,

Please find enclosed the Waste Water Discharge Certificate of Authorisation Application for the Ballinspittle & Carrettstown 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.

Yours faithfully,

<u> 14</u> Patricia Power

Director of Services





# Comhairle Contae Chorcaí Inniscarra, Co. Cork. Tel. No. (021) 4532700 • Frx No. (021) 4532727 Cork County Council

**Environmental Directorate**, Inniscarra, Co. Cork. Web: www.corkcoco.le An Stiúrthóireacht Comhshaoil, Inis Cara, Co. Corcaigh. Fón: (021) 4532700 • Faics: (021) 4532727 Sulomh Gréaulin: www.corkcoco.ie



Mr. Frank Clinton, Program Manager, Office of Climate, Licensing & Resource Use, **Environment Protection Agency**, Headquarters. PO Box 3000. Johnstown Castle Estate, **County Wexford.** 

16<sup>th</sup> December, 2009

Re: Waste Water Discharge (Authorisation) Regulations 2007 - fees payable in respect of applications to be submitted by 22<sup>nd</sup> December, 2009.

Dear Mr. Clinton,

I refer to the 72 certificate applications and 3 discharge authorisation licence applications which will be submitted by the council under the above regulations before the 22<sup>nd</sup> December next.

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I note that the fees payable in respect of these applications amount to €246,000 and refer you to our letter of 7th November 2008 (sent by Ted O'Leary, Senior Executive Officer) seeking a rebate/reduction, as is provided for under Art 38 (3) of the regulations. I note that since that letter the council has paid a further € 570,000 in applications fees meaning that the total amount paid by the council to date amounts to  $\in$  1,245,000.

As you will appreciate, in the current economic climate, the amount payable in respect of this final batch of applications is a significant sum that was not budgeted for in 2009. Moreover we have paid a substantial amount in fees already and have made our case for a reduction/rebate. Accordingly, I must advise that we are not submitting payment in respect of these applications as we anticipate the rebate due to the council exceeds the fees payable.

Yours faithfully,

Louis Duffy. **Director of Service**, **Environment & Emergency Services Directorate** 



Consent for inspection purpose only any other use.

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an independent

WWD Application Form Version 2/09

This is a draft document and is subject to revision.



# Waste Water Discharge Certificate of Authorisation Application Form

### **Environmental Protection Agency**

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

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Waste Water Discharge Certificate of Authorisation Application Form

## **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 new legislation	To reflect changes in legislation
		Inclusion in the requirement of to submit information on private WWTPs within the agglomeration.	To obtain an overview of all discharges within the agglomeration.
		Consent	

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Waste Water Discharge Certificate of Authorisation Application Form

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

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Waste Water Discharge Certificate of Authorisation Application Form

### 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 the purch following Checklist provided web based tool: in http://78.137.160.73/epa wwd licensing/

This Application Form does not provide 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 – <u>http://www.epa.ie/whatwedo/licensing/wwda/</u>) 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. <u>The abbreviation "N/A" should not be used</u>.

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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).

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Note: <u>Drawings.</u> The following guidelines 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.



### 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 Nº A.1

### **Non-Technical Summary**

Ballinspittle is located approximately 7 kilometers to the south-west of Kinsale and 13.5 kilometers to the south-east of Bandon. The village is served by Regional Road R-600-256. In the overall strategy of the Local Area Plan, Ballinspittle is designated as a village within the Bandon Electoral Area. The village has experienced a large amount of development over the last number of years.

Garrettstown is a coastal settlement and holiday resort, located approximately 3 kilometers to the south of Ballinspittle and 8 kilometres to the south-west of Kinsale. Garrettstown Strand and White Strand lie to the western end of the settlement and Bullen's Bay lies to the east. The settlement has a permanent year round population, but the population of the area during the summer months is significantly higher. The settlement is served by Regional Road R-604-0. In the overall strategy of the Local Area Plan, Garrettstown/Garylucas is recognized as a location which consists of a number of settlement nodes and is also a popular holiday and day trip resort.

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

The Ballinspittle & Garrettstown Agglomeration can be split up into 3 catchments, each served by a WWTP or septic tanks.

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### Catchment 1

The first catchment consists of the bulk of Ballinspittle village. In general the sewer network runs from the Church located at the Northern extent of the village to the septic tank located in the GAA grounds. These sewers are a combined system.

The septic tank which serves this catchment is operated by Cork County Council.

The system is comprised of the following;

- Inlet
- Storm Overflow Chamber ٠
- Septic Tank
- Soakway
- Outlet •

When the tank was built in the 1950s the PE contributing to it was far less than at present. The tank has an estimated capacity of 105PE. The current load on the septic tank is approximately 267PE. 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. This septic tank discharges to a soakway and then to an outfall to the adjacent Ballinspittle River.

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

### Catchment 2

The second catchment consists of the new Council housing estate, currently under construction in the West side of the village. The sewers in this catchment gravitate down to the pumping station located at the entrance to the estate. The effluent is then pumped to the Package WWTP which is located to in the Northern corner of the site. This is a separate sewer system.

As the WWTP has not been commissioned, arrangements for the operation of the plant are not in place yet.

The system is comprised of the following;

- Inlet .
- Rotating Biological Contactor Unit (RBC) •
- Outlet •

This Package WWTP is designed to have an ultimate design capacity of 100PE. When the plant is commissioned, it will provide treatment for a PE of 70.

Wastewater flows into the Primary Settlement Tank (PST) where solids are settled out and are retained. The accumulated sludge is drawn off periodically. Partially clarified liquor containing fine suspended solids flows upwards into the first stage of the Biozone which houses the Anoxic RBC, for initial breakdown of organic pollutants by the biomass (biodegradation). Suspended solids return to the PST via the slot in the bottom of the Biozone and the liquor is transferred to the second stage Biozone and the Aerobic RBC stage, for further treatment. Any solids remaining are settled out in the hopper bottomed Final Clarifier. The treated effluent then falls by gravity to the Ballinspittle River, at the discharge point.

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As the WWTP has not been commissioned, there is no sampling regime in place.

### Catchment 3

The third catchment consists of the 2 public toilets serving the beaches at Garrettstown and White Strand.

This catchment is served by 2 septic tanks, both of which are operated by Cork County Council.

The system serving the public toilet at Garrettstown Strand is comprised of the following;

- 2 Open bottomed MH Chambers functioning as a Septic Tank
- Soakway or Percolation Area

The system serving the public toilet at White Strand is comprised of the following;

- Septic Tank
- Soakway or Percolation Area

No records or drawings exist on either system. It is believed that both discharge to soakways or percolation areas. Therefore the final discharges are to ground water.

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 neither septic tank has a sampling regime in place.

Ballinspittle and Garrettstown are part of the Garrettstown Sewerage Scheme, which is included in the Water Services Investment Programme 2007-2009. The DEHLG has confirmed that their contribution towards the scheme will be capped at 36%. Funding is not yet in place for this project. No decision has been made on the form of contract to be used in the procurement process.

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

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

- Domestic Population
- Commercial Premises
- School
- 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 The septic tanks and WWTPs within the agglomeration do 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.

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### 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 Septic Tank and WWTP in Ballinspittle discharges to the Ballinspittle River which runs through the village from North to South and to ground water. The average inflow to the Septic Tank and WWTP is in the order of 88m<sup>3</sup>/day which is equivalent to a PE of 389. The final effluent from the Septic tanks at Garrettstown Beach and White Strand discharges to groundwater. The average inflow to the Septic tanks is estimated at 23m<sup>3</sup>/day which is equivalent to a PE 100.

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

### Technology

No detail design has been carried out for the treatment plant as yet. However it is highly likely that the new WWTP will include the following elements;

other

- Grit Removal and Screening
- Storm Holding Tank
- Inlet Flow Measurement Chamber
- Sequence Batch Reactor
- Clarifier
- Sludge Picket-Fence Thickener
- Sludge Holding Tank
- Final Effluent Flow Measurement Chamber
- Disinfection system
- Control House
- Odour Control Units
- A SCADA Control System

### Techniques

The new WWTP shall be operated and maintained in accordance with best practice.

# 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.

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

No sampling is currently carried out on the influent and effluent from any of the Septic Tanks or Treatment Plants. Cork County Council Environmental Section, Inniscarra and the EPA monitor Ballinspittle River at Ballinspittle Bridge, Cork County Council Environmental Section also monitors Water Quality in Garrettstown Stream and at Garrettstown Strand. Water quality in Courtmacsherry Bay is not monitored by the EPA. Kinsale Harbour is the nearest coastal water body monitored by the EPA.

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### SECTION B: GENERAL

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

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

Name of Agglomeration: Ballinspittle & Garrettstown

### **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</u> <u>marked in red ink</u>.

Name*:	Cork County Council	
Address:	County Hall	15 <sup>0</sup> .
	Carrigrohane Road	net
	Cork	14. A
		offer at
Tel:	021 4276891	of cel
Fax:	021 4276321	outedite
e-mail:	÷	tor et

\*This should be the name of the Water Services Authority in whose ownership or control the waster 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.

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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*:	Frank Morrison	
Address:	Kilmore	
	Ballinspittle	
	Kinsale	
	Co. Cork.	
Grid ref	159021 E, 045776 N 🔬	
(6E, 6N)	A A OL	
Level of	Primary	
Treatment	Ser All	
<b>.</b>	out Calife	
Name*:	Frank Morrison	
Address:	Ballycatteen	
	Ballinspittle	
	Kinsale for the	
	Co. Cork. S	
Grid ref	158618 E, 046139 N	
(6E, 6N)	C 0115	
Level of	Secondary	
Treatment		
		, see
Name*:	Frank Morrison	× <sub>e</sub>
Address:	Garrettstown Beach	
	Garrettstown	
	Kinsale	
	Co. Cork.	
Grid ref	159939 E, 043636 N	
(6E, 6N)		
Level of	Primary	
Treatment		
Nometi	Frank Marrican	
Address	White Strand, Carrylycas	
Addiess.	Lispatrick Lower	
	Correttetown	
Grid rof		
(AF AN)	1003/2 L, 043220 N	
	Primany	
Level OI	rilliary	

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### Treatment

\*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 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.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	Surface Water and Ground Water 🔊
to	ally all
Type of	Soakway and Pipe to River 225mm Dia. Concrete Pipe)
Discharge	all the state
Unique	SW1BSPT SW1BSPT
Point Code	ectitante
Location	Kilmore, Ballinspittle <sup>0</sup>
Grid ref	159079 E, 045756 N
(6E, 6N)	
	OY.

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**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 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	Surface Water
Type of Discharge	Pipe to River

Unique Point Code	SW2BSPT	
Location	Ballycatteen, Ballinspittle	
Grid ref (6E, 6N)	158620 E, 046156 N	

Discharge	Ground Water
to	
Type of	Via Soakway
Discharge	
Unique	GW3BSPT
Point Code	
Location	Garrettstown Beach, Garrettstown
Grid ref	159923 E, 043644 N
(6E, 6N)	·

Discharge	Ground Water
to	
Type of	Via Soakway
Discharge	
Unique	GW4BSPT
Point Code	N <sup>2</sup> <sup>e</sup> .
Location	White Strand, Garrylucas, Lispatrick Lower, Garrettstown
Grid ref	160985 E, 043241 N
(6E, 6N)	OTI of all

\*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

**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	Pipe to River (225mm Dia. PVC Pipe)	 
Unique Point Code	SW5BSPT	
Location	Kilmore, Ballinspittle	
Grid ref (6E, 6N)	E, 159040, N 045781	

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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
	$\checkmark$	

### **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
	and the second sec

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

	60 JY			
has been obtained	COB.	$\checkmark$	is being processed	
is not yet applied for	x <sup>or</sup>		is not required	
- OTSC	<b>y</b>			
$\mathcal{C}$				

Local Authority Planning File Reference Nº:

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
		1

#### **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.

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

Within the SFADCo Area	Yes	No
		1

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

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

### 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. ion

X

Population Equivalent	489
Data Compiled (Year)	2009
Method	House Counts and Ropulation Data
<u></u> <u></u> <u></u>	Рор

### Domestic Contribution

There are 104 existing dwellings within the agglomeration boundary.

### **Non Domestic Contribution**

The non domestic contribution is made up of 3 Shops, 2 Public Houses, 1 Garage, 1 School, 1 Post Office, 1 Café, 1 Hair Salon, 1 Sports Hall and 1 Community Centre.

### **Pending Development**

A further 6 dwellings and 1 shop have been granted planning permission within the agglomeration boundary.

The total number of dwellings, existing and future is 110. Assuming that there are c2.8 persons per household (CSO Data), this gives a PE of 308. Assuming that the non-domestic contribution is 15% of the domestic, adds another PE of 46. This brings the total PE to 354. 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 35, resulting in a PE of 389.

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There is no data available on the PE served by the public toilets in Garrettstown Beach and White Strand. A PE of 50 has been estimated for each. This brings the grand total for the agglomeration up to 489.

### 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 489 obtained in the previous section includes the following; A PE of 17 from dwellings that may connect to the public sewer during the course of the licence (Planned), A PE of 35 which is an additional 10% allowance for future development. This allows for a total potential increase of up to 52PE 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.



\*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.

Ballinspittle and Garrettstown are part of the Garrettstown Sewerage Scheme, which is included in the Water Services Investment Programme 2007-2009. The DEHLG has confirmed that their contribution towards the scheme will be capped at 36%. Funding is not yet in place for this project.

**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.

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Attachment included	Yes	No
		<ul> <li>✓</li> </ul>

### **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
		$\checkmark$

### **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.

150.

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. ¢Ó

Yes	No
	$\checkmark$
	Yes

### 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

Ballinspittle is located approximately 7 kilometers to the south-west of Kinsale and 13.5 kilometers to the south-east of Bandon. The village is served by Regional Road R-600-256. In the overall strategy of the Local Area Plan, Ballinspittle is designated as a village within the Bandon Electoral Area. The village has experienced a large amount of development over the last number of years.

Garrettstown is a coastal settlement and holiday resort, located approximately 3 kilometers to the south of Ballinspittle and 8 kilometres to the south-west of Kinsale. Garrettstown Strand and White Strand lie to the western end of the settlement and Bullen's Bay lies to the east. The settlement has a permanent year round population, but the population of the area during the summer months is significantly higher. The settlement is served by Regional Road R-604-0. In the overall strategy of the Local Area Flan, Garrettstown/Garylucas is recognized as a location which consists of a number of settlement nodes and is also a popular holiday and day trip resort.

The Ballinspittle & Garrettstown Agglomeration can be split up into 3 catchments, each served by a WWTP or septic tank or tanks.

### Catchment 1

The first catchment consists of the bulk of Ballinspittle village. In general the sewer network runs from the Church located at the Northern extent of the village to the septic tank located in the GAA grounds. These sewers are a combined system.

The septic tank which serves this catchment is operated by Cork County Council.

The system is comprised of the following;

- Inlet
- Storm Overflow Chamber
- Septic Tank
- Soakway
- Outlet

### **Primary Treatment**

Under normal operating conditions all of the influent enters the septic tank, which has a capacity of  $21.1m^3$ . The capacity in terms of PE has been estimated at 105.

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Here the heavy solids settle to the bottom of the tank and are stored for collection. The effluent then flows through a soakway and on to the primary discharge point. The effluent only takes approximately 5 minutes to pass through the soakway. This was confirmed by a dye test carried out on the 16/10/09. The dye was introduced in the outlet chamber and the time taken for it to work its way to the outfall was noted. 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.

When the tank was built in the 1950s the PE contributing to it was far less than at present. The current load on the septic tank is approximately 267PE. This septic tank discharges to a soakway and then to outfall to the adjacent Ballinspittle River. The septic tank is badly overloaded and is not operating efficiently. It is highly unlikely that the effluent meets the required standard.

### Catchment 2

The second catchment consists of the new Council housing estate, currently under construction in the West side of the village. The sewers in this catchment gravitate down to the pumping station located at the entrance to the estate. The effluent is then pumped to the WWTP which is located to in the Northern corner of the site. This is a separate sewer system.

As the WWTP has not been commissioned, arrangements for the operation of the plant are not in place yet.

The system is comprised of the following

- Inlet
- Rotating Biological Contactor Unit (RBC)
- Outlet

This Package WWTP is designed to have an ultimate design capacity of 100PE. When the plant is commissioned, it will provide treatment for a PE of 70. The treatment plant will also meet the following discharge limit standards;

- BOD 20mg/l
- SS 30mg/l

### **Primary Treatment**

Wastewater flows into the Primary Settlement Tank (PST) where solids are settled out and are retained. The accumulated sludge is drawn off periodically.

### Secondary Treatment

Partially clarified liquor containing fine suspended solids flows upwards into the first stage of the Biozone which houses the Anoxic RBC, for initial breakdown of organic pollutants by the biomass (biodegradation). The Rotating Biological Contactor (RBC), which is central to operation supports a biologically active film (biomass) of anoxic and aerobic micro-organisms.Suspended solids return to the PST via the slot in the bottom of the Biozone and the liquor is transferred to the second stage Biozone and the Aerobic RBC stage, for further treatment. Any solids remaining are settled out in the hopper bottomed Final Clarifier. The treated effluent then falls by gravity to the Ballinspittle River, at the secondary discharge point.

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### Catchment 3

The third catchment consists of the 2 public toilets serving the beaches at Garrettstown and White Strand.

This catchment is served by 2 septic tanks, both of which are operated by Cork County Council.

The system serving the public toilet at Garrettstown Strand is comprised of the following;

- 2 Open bottomed MH Chambers functioning as a Septic Tank
- Soakway or Percolation Area

The system serving the public toilet at White Strand is comprised of the following;

- Septic Tank
- Soakway or Percolation Area

No records or drawings exist on either system. It is believed that both discharge to soakways or percolation areas. Therefore the final discharges are to ground water.

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.

### **Primary Treatment**

Under normal operating conditions all of the influent enters the septic tanks, which has capacity of  $3m^3$  at Garrettstown Beach and  $6m^3$  at White Strand. Note that these Capacities have been estimated from the quantity of sludge removed when the tanks are emptied as there are no other records available. The capacity in terms of PE is correspondingly small at 11PE (Garrettstown Beach) and 22PE (White Strand). 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 current estimated load on each of the septic tanks is 50PE. Both tanks discharge to soakways or percolation areas. The septic tanks are badly overloaded and are 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

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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

There is one Storm Water Overflow (SWO) associated with the Septic Tank in Ballinspittle. The tank is provided with a Storm Water Overflow Chamber which diverts Storm water to the adjacent Ballinspittle River, via the Storm Water Overflow.

There is no information regarding the frequency of storm water overflows, or the quantities discharged.

There are no drinking water abstractions, salmonid waters or shellfish waters effected by the SWO. The designated bathing waters at The Beach in Garrettstown and White Strand at Garrylucas are affected. Therefore the quality standards or objectives for the aquatic environment considered in the DoEHLG "Procedures and Criteria in Relation to Storm Water Overflows" (1995) apply.

However there are no records on the number and volume of storm events, the dilution available and there are also no screens in place. (As detailed in the DoEHLG "Procedures and Criteria in Relation to Storm Water Overflows" (1995) in "Section 3.2 Bathing waters").

The DoEHLG "Procedures and Criteria in Relation to Storm Water Overflow" (1995), provides assessment criteria for existing SWO. These criteria are discussed below;

1. Determine if the SWO causes significant visual or aesthetic impact and public complaints.

There are no records of public complaints regarding the SWO to date.

2. Determine if the SWO causes deterioration in water quality of the receiving water.

There is no specific data regarding the overflows from the septic tank. However for the 2008 bathing season, Garrettstown Beach and White Strand at Garrylucas have achieved good water quality status and complied with the EU guide and mandatory values. Both areas have achieved good water quality status for the past six years.

3. Determine if the SWO gives rise to failure in meeting the requirements of National Regulations on foot of EU Directives (Bathing Waters etc).

There is no specific data regarding the overflows from the septic tank. However for the 2008 bathing season, Garrettstown Beach and White Strand at Garrylucas have achieved good water quality status and

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complied with the EU guide and mandatory values. Both areas have achieved good water quality status for the past six years.

4. Determine if the SWO operates in dry weather.

There are no records to indicate if the SWOs operate in dry weather.

### C.1.2 Pumping Stations

### Number of duty and standby pumps at each pump station;

The sewers in Catchment 2 gravitate down to a pumping station located at the entrance to the estate. The effluent is then pumped to the WWTP which is located to in the Northern corner of the site. There are 2 AFP1031 Pumps, one duty and the other standby in this pumping station. The pumps have a duty capacity of 8l/s.

### The measures taken in the event of power failure;

Not Applicable, as the operation and maintenance contract is not in place yet.

### Details of storage capacity at each pump station;

Approximately 16 hours storage capacity is provided in the pumping station.

# Frequency and duration of activation of emergency overflow to receiving waters. Clarify the location where such discharges enter the receiving waters.

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Not Applicable, as the WWTP has not been commissioned yet.

**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	Νο	
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### **DISCHARGES TO THE AQUATIC** SECTION D: 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 web based submitted via the following link: The applicant should address in http://78.137.160.73/epa\_wwd\_licensing/. 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. post

**D.1(i) Discharges to Surface Waters** Details of all discharges of water set the ferr 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', 'Ĕ吶ssions 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)

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Attachment included	Yes	No
		$\checkmark$

### 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: <u>http://78.137.160.73/epa\_wwd\_licensing/</u>. 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
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### 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 are 2 private WWTPs with Section 4 discharge licences in the Ballinspittle & Garrettstown agglomeration. The first private WWTP serves Kilmore Wood, a new estate in Ballinspittle. This is an EPS 100 PE BAF treatment system.

The Kilmore Wood WWTP is comprised of the following;

- Inlet
- Primary Settlement Tank 1
- Primary Settlement Tank 2
- Aeration Tank
- Clarifier
- UV Disinfection Unit
- Reed-bed
- Outlet

This WWTP discharges to the Ballinspittle River.

The second WWTP serves the Glor Na dTonn estate. This is an EPS Bison 80 PE BAF treatment system.

The Glor na dTonn WWTP is comprised of the following;

- Inlet
- Primary Settlement Zone
- Biological Aerated Filter
- Final Settlement (Humus) Tank
- Outlet

This WWTP discharges to groundwater via a sand filter.

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Location maps and discharge licences 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	ΡΤ_ΤΥΡΕ	LA_NAME	RWB_TYPE	RWB_NAME	DESIGNATION	EASTING	NORTHING
SW1BSPT	Primary	Cork County Council	River	Ballinspittle River	None	159079	045756
SW2BSPT	Secondary	Cork County Council	River	Ballinspittle River	None	158620	046156
GW3BSPT	Secondary	Cork County Council	Ground	Bandon_1	None	159923	043644
GW4BSPT	Secondary	Cork County Council	Ground	Bandon_1	None	160985	043241
SW5BSPT	Storm Water Overflow	Cork County Council	River	Ballinspittle River	None	159040	045781

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: <u>http://78.137.160.73/epa wwd licensing/</u>.

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: <u>http://78.137.160.73/epa\_wwd\_licensing/</u>.

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 Ballinspittle & Garrettstown Waste Water Discharge Licence Application Form**

There is no monitoring system in place for any of the Septic Tanks or WWTP included in this application. For the purposes of this application samples were collected at various outlets and at ambient monitoring points and tested by the Environmental Directorate of Cork County Council.

Cork County Council Environmental Section, Inniscarra and the EPA monitor Ballinspittle River at Ballinspittle Bridge, Cork County Council Environmental Section also monitors Water Quality in Garrettstown Stream and at Garrettstown Strand. Water quality in Courtmacsherry Bay is not monitored by the EPA. Kinsale 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:

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- 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 nonaccredited 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.

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

Applicants sampling	should	submit	the	following	information	for	each	moni	toring	and	
PT_CD	PT_TYP	E MOI	N_TY	PE EA	STING	NOF	THIN	G	VERIF	IED	_

SW1	Primary Discharge	S	159079 E	045756 N	Y
aSW-1d	Ambient	S	159151 E	045686 N	Y
GW3	Secondary Discharge	S	159939 E	043636 N	Y
aGW-3d	Ambient	S	159971 E	043597 N	Y
GW4	Secondary Discharge	S	160972 E	043220 N	Y
aGW-4d	Ambient	S	161006 E offer	<sup>≫</sup> 043266 N	Ŷ

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. Sic

#### **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
			$\checkmark$	

### 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 crossreferences 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: <u>http://78.137.160.73/epa\_wwd\_licensing/</u>. 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: <u>http://78.137.160.73/epa\_wwd\_licensing/</u>. 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

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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 & Impact of Discharges

The Ballinspittle River (Water Body Code IE\_SW\_20\_1050, River Code 20B09) is contained within Hydrometric Area 20. The Ballinspittle River is derived from a number of small feeder streams in the Gortnacrusha area. The river is approximately 4km long and it generally flows south towards Courtmacsherry Bay (Water Body Code IE\_SW\_090\_0000) via Garrettstown Strand.

The Ballinspittle River has "Good" status and has been classified as being "Not at Risk" or strongly expected to achieve good status by 2015 under the Water Framework Directive Article 5 Characterisation (2004)

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 Ballinspittle River is monitored by the EPA. EPA monitoring station 20B090100 is located at the bridge in Ballinspittle, approximately 500m upstream of Ballinspittle Septic Tank primary discharge point. The sampling results show that the Ballinspittle River has maintained an "Unpolluted" status since 2001. Eutrophication is unlikely to occur in water bodies with a biological quality rating of Q4 or higher. The monitoring results are shown in **Table F1.1** below.

<b>Biological</b>	Quality Rating	s (Q Values)
Station	1995-1997	2001-2003
20B090100	3-4	4

### Table F1.1.

Courtmacsherry Bay has "Unassigned" status and has been classified as being Not at Risk" or strongly expected to achieve good status by 2015 under the Water Framework Directive Article 5 Characterisation (2004).

Water quality in Courtmacsherry Bay is not monitored by the EPA. Kinsale Harbour is the nearest coastal water body monitored by the EPA, where the water quality is classed as Intermediate.

The Ballinspittle River is not designated as salmonid water under the European Communities (Quality of Salmonid Waters Regulations, 1988 (S.I. No. 293/1988))

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The soakways associated with secondary discharges GW3BSPT and GW4BSPT are located in close proximity to the pNHAs at Garrettstown Marsh (site code 001053) and Garrylucas Marsh (site code 000087) respectively. These discharges are located approximately 2.5km away from the pNHA at Old Head of Kinsale (site code 000100).

Water Quality in the Ballinspittle River is also monitored by the Environmental Section of Cork County Council. The monitoring results for the period 1998-200 is presented in **Table F1.2** below.

Consent for inspection purposes only any other use.

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Parameter	Parameter Units	Minimum	Median	Maximum	No of Samples
BOD	mg/l 02	0.7	0.7	0.7	1
Dissolved Oxygen	mg/l 02	9.9	11.1	12.2	2
Dissolved Oxygen	%Saturation	99	111	122	2
Ortho Phosphates	mg/l P	0.1	0.03	0.04	4
pH	pH	7.8	7.8	7.8	1
Temperature	°C	9	15.9	16	3
Total Ammonia	mg/l N	0.02	0.03	1.2	4
Un-ionised Ammonia	mg/l NH₃	0	0	0	1

### Table F1.2. Ballinspittle River Monitoring Results 1998-2000

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 F1.3** below.

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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 system fauna (O-value)		Contraction 0.85	-
Phytobenthos Trophic diatom index (TDI)		8 color 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	-
Oxygenation 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) 95%ile>80% Saturation	<1 (Limit of Detection)
Dissolved oxy	jen upper limit	95%ile<120% Saturation	
Acidifica	tion Status	River Water Body	CCC Sampling Data
pH (individual values)		Soft Water 4.5 <ph<9.0 Hard Water 6.0<ph<9.0< td=""><td>7.8</td></ph<9.0<></ph<9.0 	7.8
Nutrient conditions		River Water body	CCC Sampling Data
Total Ammonia (mg N/l)		Good status≤0.065(mean) or ≤0.090(95%ile)	<0.1 (Limit of Detection)
Molybdate Rea Phosphorus (M	nctive IRP) (mg P/I)	Good status≤0.035(mean) or ≤0.075(95%ile)	<0.05 (Limit of Detection)

# Table F1.3 Criteria for Calculating Surface Water Ecological Status andEcological Potential

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The Bandon\_1 Groundwater waterbody (Water Body Code IE\_SW\_G\_014) encompasses all the percolation areas and soakways associated with the Ballinspittle & Garrettstown agglomeration.

The Bandon\_1 has "Good" status and has been classified as being "At Risk" of not achieving good status by 2015 under the Water Framework Directive Article 5 Characterisation (2004).

Garrettstown Sewerage Scheme Preliminary Report June 2006 has been included in **Attachment F**, as it contains a lot of relevant environmental information. This report has not been formally approved to date.

 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.

There were 2 drinking water abstraction points from groundwater in Ballinspittle, but these have now been decommissioned. Ballinspittle village is now supplied by mains water directly from Innishanon water treatment plant.

- 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)
    - 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,
    - 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,

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- (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)

## Assessment of Relevant Legislation Applicable to Ballinspittle & Garrettstown Discharge

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

- 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/EEQ (Not applicable),
- Urban Waste Water Treatment Directive 91/271/EEC,
- Habitats Directive 92/43/EEC,
- Bathing Water Directive 76/160/EEC, and
- Shellfish Waters Directive 79923/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 Ballinspittle & Garrettstown 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. Ambient monitoring was also carried out on the Ballinspittle River (for this application). Copies of the Water Quality Management Plans 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 nearest discharge point, secondary discharge point GW4BSPT is located approximately 2.5km North of Old Head of Kinsale SPA (site

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code 004021). The site synopsis for this SPA is included in **Attachment F**. Given this distance and the fact that this discharge is to groundwater, the SPA is unlikely to be affected.

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

The purpose of this Directive is to prevent the pollution of groundwater by substances belonging to the families and groups of substances in lists I or II in the Annex of the Directive. (80/68/EEC)

Groundwater is a valuable natural resource and as such should be protected from deterioration and chemical pollution. This is particularly important for groundwater dependent ecosystems and for the use of groundwater in water supply for human consumption. (2006/118/EC)

The soakways associated with secondary discharges GW3BSPT and GW4BSPT are located in close proximity to the pNHAs at Garrettstown Marsh (site code 001053) and Garrylucas Marsh (site code 000087) respectively.

### Drinking Water Directives 80/778/EEC

Not Applicable as there are no abstraction points affected by the discharges.

### The Urban Waste Water Treatment Directive 91/2739 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 conjection 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 combined PE of the septic tanks and WWTP in Ballinspittle and Garrettstown is 489.

### 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. There are no SACs designated in the vicinity of the primary discharge.

### 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

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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 Garrettstown Stream, Garrettstown Beach and Garrylucas, White Strand is monitored by Cork County Council to check compliance with the Quality of Bathing Water Regulations and its relevant amendments to the Blue Flag Beach Scheme as both are designated Blue Flag Beaches. The Bathing Water and Blue Flag Beach Water Quality Standards are presented below in **Table F1.4**. The Water Quality Results for Garrettstown Stream, Garrettstown Strand and Garrylucas, White Strand are presented in **Table F1.5** and **Table F1.6** below.

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

Table F1.4 Bathing W	later and Blue Flag	Beach Water Q	<b>Quality Standards</b>
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Dementere	linit there	Result	
Parameters	Unit or	24/06/2004	
Total Coliforms	No/100ml	61300	
Faecal Coliforms	No/190ml	27500	
Faecal Streptococci	Nov 100 ml	No Data	

01.

### Table F1.5 Water Quality in Garrettstown Stream

		Results				
Parameters	Units	Garrettstown Beach 25/08/09	<i>Garrylucas, White Strand 25/08/09</i>			
Total Coliforms	No/100ml	78	43			
Faecal Coliforms	No/100ml	33	43			
Faecal Streptococci	No/100ml	4	5			

# Table F1.6 Water Quality in Garrettstown Strand and Garrylucas WhiteStrand

For the 2009 bathing season, Garrettstown Beach and Garrylucas, White Strand have achieved good water quality status and complied with the EU guide and mandatory values. Both areas have 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

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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. There are no designated shellfish waters in the vicinity of the discharges. The closest designation is at Kinsale which is located approximately 22km from the primary discharge point. This is the nearest discharge to surface waters and the distance was measured around the Old Head of Kinsale.

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

As no upstream ambient sample was taken, the downstream ambient sample results were used instead. These calculations have been carried out on the Ballinspittle River.

Mass Balance Equation for Orthophosphates:

Median flow of River (SWRBD) =  $0.4644m^3$ /sec Median  $OPO_4$ -P in River (downstream) = 0.05mg/l Average volume of discharge =  $0.00083 \text{m}^3/\text{sec}$ Median value for  $OPO_4$ -P in discharge = 0.4mg/l

 $C_{\text{final}} = (0.4644 \times 0.05) + (0.00083 \times 0.4)$ (0.4644 + 0.00083)

 $C_{final} = 0.0506 \text{mg/l OPO}_4\text{-P}$ 

anyotheruse The increase in Orthophosphate due to the discharge from Ballinspittle Septic Tank is 0.0006mg/l.

only

### Mass Balance Equation for BOD:

Flow of River (95%ile) =  $0.0759m^3$ /sec Median BOD in River (downstream) = 1.0mg/l Average volume of discharge =  $0.00083 \text{m}^3/\text{sec}$ Median value for BOD in discharge = 300.0mg/l

 $C_{final} = (0.0759 \times 1.0) + (0.00083 \times 300.0)$ (0.0759 + 0.00083)

 $C_{final} = 4.23 mg/l BOD$ 

The increase in BOD due to the discharge from Ballinspittle Septic Tank is 3.23mg/l.

Mass Balance Equation for Suspended Solids:

Flow of River (95%ile) =  $0.0759m^3/sec$ Median SS in River (downstream) = 6.0mg/l Average volume of discharge =  $0.00083m^3/sec$ Median value for SS in discharge = 350mg/l

 $C_{\text{final}} = (0.0759 \times 6.0) + (0.00083 \times 350)$ (0.0759 + 0.00083)

C<sub>final</sub> = 9.72mg/l Suspended Solids

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The increase in Suspended Solids due to the discharge from Ballinspittle Septic Tank is 3.72mg/l.

Mass Balance Equation for Total Phosphates:

Median Flow of River (SWRBD) =  $0.4644m^3$ /sec Median TP-P in River (downstream) = 0.05mg/lAverage volume of discharge =  $0.00083m^3$ /sec Median value for TPO4-P in discharge = 12.0mg/l

 $C_{\text{final}} = (0.4644 \times 0.05) + (0.00083 \times 12.0) \\ (0.4644 + 0.00083)$ 

C<sub>final</sub> = 0.071mg/l Total Phosphates

The increase in Total Phosphates due to the discharge from Ballinspittle Septic Tank is 0.021mg/l.

Mass Balance Equation for Total Nitrogen:

Flow of River (95%ile) = 0.0759m<sup>3</sup>/sec Median Total Nitrogen in River (downstream) = 6.52mg/l Average volume of discharge = 0.00083m<sup>3</sup>/sec Median value for Total Nitrogen in discharge = 85.0mg/l

 $C_{\text{final}} = (0.0759 \times 6.52) + (0.00083 \times 85.0)$  (0.0759 + 0.00083)

C<sub>final</sub> = 7.37mg/l Total Nitrogen

The increase in Total Nitrogen due to the discharge from Ballinspittle Septic Tank is 0.85mg/l.

Mass Balance Equation for Sulphates:

Flow of River (95%ile)  $\stackrel{\scriptstyle \leftarrow}{=} 0.0759m^3/sec$ Median Sulphates in River (downstream) = 30.0mg/l Average volume of discharge = 0.00083m<sup>3</sup>/sec Median value for Sulphates in discharge = 30.0mg/l

 $C_{\text{final}} = (0.0759 \times 30.0) + (0.00083 \times 30.0) \\ (0.0759 + 0.00083)$ 

C<sub>final</sub> = 30.0mg/l Sulphates

The increase in Sulphates due to the discharge from Ballinspittle Septic Tank is 0.0mg/l.

Mass Balance Equation for Ammonia-N:

Flow of River (95%ile) = 0.0759m<sup>3</sup>/sec Median Ammonia in River (upstream) = 0.1mg/l Average volume of discharge = 0.00041m<sup>3</sup>/sec Median value for Ammonia in discharge = 1.5mg/l

 $C_{\text{final}} = (0.0759 \times 0.1) + (0.00083 \times 1.5) \\ (0.0759 + 0.00083)$ 

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### C<sub>final</sub> = 0.115mg/l Total Ammonia

The increase in Ammonia due to the discharge from Ballinspittle Septic Tank is 0.015mg/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.

.01

ABS_CD	AGG_SERVED	ABS_VOL	PT_CD	DIS_DS	EASTING	NORTHING	VERIFIED
Abstraction Code	Agglomeration served	Abstraction Volume in m³/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.

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### SECTION G: PROGRAMMES OF IMPROVEMENTS

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

### G.1 Compliance with Council Directives

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

- Dangerous Substances Directive 2006/11/EC,
- Water Framework Directive 2000/60/EC,
- Birds Directive 79/409/EEC,
- Groundwater Directives 80/68/EEC & 2006/118/EC,
- Drinking Water Directives 80/778/EEC,
- Urban Waste Water Treatment Directive 91/271/EEC,
- Habitats Directive 92/43/EEC,
- Environmental Liabilities Directive 2004/35/EC,
- Bathing Water Directive 76/160/EEC, and
- Shellfish Waters Directive (2006/113/EC).

Ballinspittle and Garrettstown are part of the Garrettstown Sewerage Scheme, which is included in the Water Services Investment Programme 2007-2009. The DEHLG has confirmed that their contribution towards the scheme will be capped at 36%. Funding is not yet in place for this project.

**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
		$\checkmark$

## **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 no details are available yet.

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

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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.

No detail design has been carried out for the treatment plant as yet. However it is highly likely that the new WWTP will include the following elements;

- Grit Removal and Screening
- Storm Holding Tank
- **Inlet Flow Measurement Chamber**
- Sequence Batch Reactor
- Clarifier
- Sludge Picket-Fence Thickener
- Sludge Holding Tank
- **Final Effluent Flow Measurement Chamber**
- **Disinfection system**
- Control House
- **Odour Control Units**
- A SCADA Control System

anyother only Attachment G.3 should contain the most becent 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.



#### **Storm Water Overflows G.4**

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. This tank will have a minimum capacity of 108m3 i.e. 2hrs x 3DWF.

**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
		<b>√</b>

### 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 the organisation (on behalf of the organisation) Print signature name: of the organisation to the test of the organisation of the organisat

### 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	<sup>50</sup> .
Signed by :	Date :
Print circulture organisation)	
Print signature name:	· · · · · · · · · · · · · · · · · · ·
Position in organisation:	
Co-Applicants	
Signed by :	Date :
Print signature name:	
Position in organisation:	
Signed by :	Date :
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.

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### **TABLE OF CONTENTS** ATTACHMENTS FOR BALLINSPITTLE AND GARRETTSTOWN APPLICATION

### Section A

A1\_Map1(Location of Treat. Plant.) A1\_Map2(Location of Treat. Plant.) A1 Map3(Location of WWTP) A1\_Map4(Location of WWTP)

### Section B

B1\_Map5(Agglomeration Boundary) B1\_Map6(Agglomeration Boundary) B2\_Map7(Location Plan of WWTP) B2\_Map8(Location Plan of WWTP) B3\_Map9(Location of Primary Discharge Point) B4 Map10(Location of Secondary Discharge Point) B4\_Map11(Location of Secondary Discharge Point) B5\_Map12(Location of StormWater Overflow)

Section D D1\_Map13(Location of Treat. Plant.)Kilmone inclusion D1\_Map14(Location of Treat. Plant.)Glor and for Attachment D1 Glor Na dTonn Di Attachment D1 Kilm **\$** 

### Section E

Attachment E2 CCC Inniscarra Lab Accreditation 240809 Attachment E4 Ballycotton Malytical Data 071209

### Section F

Attachment F1 Ballinspittle River Report WFD 141009 Attachment F1 Bandon\_1 Ground Water Report WFD 161009 Attachment F1 Courtmacsherry Bay Report WFD 041109 Attachment F1 Old Head of Kinsale Site Synopsis 191109 Attachment F1 Garrettstown WWTP Preliminary Report June 2006 051109

### Section G

No Attachments

### **Online Data**

Online Tables Ballinspittle & Garrettstown 161209



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