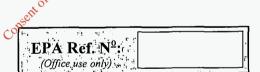
This is a draft document and is subject to revision.



Waste Water Discharge Licence Application Form



Environmental Protection Agency

PO Box 3000, Johnstown Castle Estate, Co. Wexford

Lo Call: 1890 335599 Telephone: 053-9160600 Fax: 053-9160699

Web: www.epa.ieEmail: info@epa.ie

Tracking Amendments to Draft Application Form

Version	Date	Amendment since	Reason
No.		previous version	
V. 1.	11/10/07	N/A	
V2.	18/10/07	Inclusion of a Note 1 superscript for Orthophosphate in Tables D.1(i)(b) & D.1(ii)(b).	To highlight the requirement for filtered samples in measurement of O-Phosphate for waste water discharges.
V.3.	13/11/07	Amend wording of Section F.2 to include 'abstraction'.	To accurately reflect the information required
		Amend wording of Checklist in Annex to reflect wording of Regulation 16(5) of S.I. No. 684 of 2007.	To accurately reflect the Regulations and to obtain the application documentation in appropriate format.
		Inclusion of uniqued point code for each point of discharge and storm water overflow.	To aid in cross-referencing of application documentation.
V.4	18/04/08	Inclusion of requirement to provide of agglomeration to which the application relates.	To accurately determine the agglomeration to be licensed.
		Amend wording of Section B.7. (iii) to reflect the title of Water Services Authority.	To accurately reflect the Water Services Act, 2007.
-		Addition of new Section B.9 (ii) in order to obtain information on developments yet to contribute to the waste	1
		water works.	To obtain accurate information on design and
		Addition of sub-sections C.1.1 & C.1.2 in order to clarify information required for Storm water overflow and pumping stations	spill frequency from these structures.
		within the works. Amend Section D.1 to include a requirement for monitoring data for influent	

Waste Water Discharge Authorisation Application Form

		, ————————————————————————————————————	
		to waste water treatment plants, where available. Amend wording of Section E.1 to request information on composite sampling/flow monitoring provisions.	the plant. To acquire accurate information on the sampling and monitoring provisions for discharges from the works.
V.5	07/07/2008	Amend wording of B.7 (iii) to include reference to Water Services Authorities. Amend Section G.1 to	To accurately reflect the Water Services Act, 2007 requirements.
		include Shellfish Waters Directive.	
V.6	26/08/2008	Amendments to Section D to reflect new web based reporting.	To clarify the reporting requirements.
		Amended requirements for reporting on discharges under E.1 Waste Water Discharge Frequency and Quantities.	To streamline reporting requirements.
		Amendment to Section F.1 to specify the type of monitoring and reporting required for the background environment.	
		Removal Annexes to application form.	To reflect the new web based reporting requirements.
V.7	14/05/2012	Amendments to Section B.6 and Section F.1 to take account of the requirements of European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. No. 477 of 2011) in terms of Appropriate Assessment under Article 6(3) of the Habitats Directive (92/43/EEC).	To accurately reflect the Habitats Regulations 2011 (S.I. No. 477 of 2011)
		Update references to new legislation	To reflect changes in legislation

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

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ANNEX 1: TABLES/ATTACHMENTS

ANNEX 2: CHECKLIST

ABOUT THIS APPLICATION FORM

This form is for the purpose of making an application for a Waste Water Discharge Licence under the Waste Water Discharge (Authorisation) Regulations, 2007 as amended, or for the review of an existing Waste Water Discharge licence.

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

A valid application for a Waste Water Discharge Licence must contain the information prescribed in the Waste Water Discharge (Authorisation) Regulations, 2007 as amended. Regulation 16 of the Regulations sets out the statutory requirements for information to accompany a licence application. The application form is designed in such a way as to set out these questions in a structured manner and not necessarily in the order presented in the Regulations. In order to ensure a legally valid application in respect of Regulation 16 requirements, please complete the Regulation 16 Checklist provided in Annex 2.

This Application Form does not purport to be and should not be considered a legal interpretation of the provisions and requirements of the Waste Water Discharge (Authorisation) Regulations, 2007 as amended. 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.

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PROCEDURES

The procedure for making and processing of applications for waste water discharge licences, and for the processing of reviews of such licences, appear in the Waste Water Discharge (Authorisation) Regulations, 2007 as amended, and is summarised below. The application fees that shall accompany an application are listed in the Third Schedule to the Regulations.

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

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

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

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

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

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

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

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The provision of information in an application for a waste water discharge licence which is false or misleading is an offence under Regulation 35 of the Waste Water Discharge (Authorisation) Regulations, 2007 as amended.

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 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 the process or determine the application until the required documents have been provided in sufficient detail and to a satisfactory standard the process or determine the application until the required documents have been provided in sufficient detail and to a satisfactory standard the process or determine the application until the required documents have been provided in sufficient detail and to a satisfactory standard the process of the process of determine the application until the required documents have been provided in sufficient detail and to a satisfactory standard the process of the

SECTION A: NON-TECHNICAL SUMMARY

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

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

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

A description of:

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

Supporting information should form Attachment Nº A.1

Non - Technical Summary

Ballygarvan is located approximately 10 kilometres south of Cork City, in the Owenabue valley. In the overall strategy of the Local Area Plan, Ballygarvan is designated as a village within Metropolitan Cork. The village is surrounded by the Metropolitan Green Belt, where it is an objective to preserve the largely undeveloped nature of the lands and to reserve lands generally for agriculture, open space or recreation uses.

In the period 2001 -2010 the population of Ballygarvan has grown considerably. There has been a significant amount of new residential development, most of which has been housing estate type development of detached and semi-detached dwellings.

The Waste Water Works Activities

At present the existing Ballygarvan WWTP treats the wastewater discharged from 135 houses within the Bride View Developments housing estates of Gleann Rua (36), Gleann Dara (32) and Gleann Alainn (66) as well as the wastewater discharged from the local school and some commercial units.

The local primary school currently has 265 students enrolled and has a staff of 13. The wastewater loading generated by the school corresponds to a population equivalent of 93 pe (based on 20 g BOD/hd/day and 40 l/hd/day

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for non-residential schools with no canteen as set out in the EPA manual "Treatment Systems for Small Communities, Business, Leisure centres and Hotels"). Similarly allowing for a nominal occupancy of 20 in the crèche, its wastewater discharge corresponds to a population equivalent of 7 PE.

In addition, there are 4 commercial units/offices plus the local shop (temporarily closed) discharging to the WWTP. The wastewater flow and BOD loading generated by these is calculated based on the recommended wastewater loading rates from offices as set out in the EPA manual "Treatment Systems for Small Communities, Business, Leisure centres and Hotels". Allowing for an average occupancy of 3 people for 8 hours per day in each of these the occupancy of 15 corresponds to a population equivalent of 5 PE.

Sources Of Emissions

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

- Domestic population
- Commercial premises
- School
- Infilltration.

The Raw sewage gravitates to an underground sump at the WWTP site. The sewage collected from the domestic, commercial and school premises is collected through a sewer system and is treated at the treatment plant.

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 current loading on the treatment plant is estimated to be 29.78 kg BOD/day in a dry weather flow of 99.89 m3/day, corresponding to a population equivalent of 496 pe.

The design loading for treatment is estimated to be 38.06 kg/day in a dry weather flow of 125.91 m3/day corresponding to a population equivalent of 634 pe.

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The final effluent from the treatment plant discharges to the Owenabue river which runs west to east past the village.

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

Although the relevant treatment stages are in place the treatment process operation is not achieving the required level of BOD, suspended solids or phosphorus removal.

To achieve the required BOD and suspended solids standards in the effluent, it is intended to install an automatic tertiary sand filter prior to discharge via the existing discharge monitoring chamber.

Measures planned to monitorie emissions into the environment.

SECTION B: GENERAL

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

B.1 Agglomeration Details

Name of Agglomeration: Ballygarvan

Applicant's Details

Name and Address for Correspondence

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

Provide a drawing detailing the agglomeration to which the licence application

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

Name*:	Cork County Council		
Address:	Floor 11,		
	County Hall,		
	Cork		

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Tel:	021-4276891
Fax:	021-4276321
e-mail:	Corporate.affairs@corkcoco.ie

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

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

Name*:	Noel O'Keefe
Address:	Floor 10,
	County Hall,
	Cork
Tel:	
Fax:	
e-mail:	noel.okeefe@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	
		1188°
		othe
		ath, ath,
Tel:	Not Applicable	ses Viol
Fax:	Not Applicable	
e-mail:	Not Applicable	OR Troop

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

Design, Build & Operate Contractor Details

Name*:	EPS Ireland
Address:	Mallow Business & Technology Park
	Quartertown
	Mallow
	Co. Cork
Tel:	022 31200
Fax:	
e-mail:	

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

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

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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*:	Ballygarvan Waste Water Treatment Plant
Address:	Ballygarvan,
	Co. Cork
Grid ref	E: 168,329
(6E, 6N)	N: 63,199
Level of	Secondary
Treatment	
Primary	021-4276891
Telephone:	
Fax:	021-4276321
e-mail:	HELENA.O'RIORDAN@CORKCOCO.IE

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

Attachment B.2 should contain appropriately scaled drawings / maps (≤A3) of the site boundary and overall site plan, including labelled discharge, monitoring and sampling points. These drawings / maps should alse 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
and the state of t	X	

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.

Type of	E.g. Pipe to River	
Discharge		
Unique	BGVNSW1	
Point Code		
Location	Ballygarvan WWTP	
Grid ref	E: 168,338	
(6E, 6N)	N: 63,189	

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
	Х	

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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.

Type of	N/A	
Discharge		· ·
Unique		
Point Code		·
Location		
Grid ref		
(6E, 6N)		

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

Attachment included Yes	No

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

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

Type of Discharge	N/A		
Unique Point Code			
Location		· · · · · · · · · · · · · · · · · · ·	
Grid ref (6E, 6N)			

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

Attachment	tincluded	Yes	No

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B.6 Planning Authority and/or Public 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	X	is being processed	
is not yet applied for		is not required	

Local Authority Planning File Reference No:	9 95026
	offic.

Attachment B.6 should contain the most recent planning permission, including a copy of all conditions, a copy of the planning inspector's report 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.

Where applicable, provide a copy of any screening for Appropriate Assessment report and Natura Impact Statement (NIS) that was prepared for consideration by any planning/public authority as defined in Regulation 2(1) of the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. No. 477 of 2011) in relation to the waste water works which is the subject of this application. Where a determination that an Appropriate Assessment is required has been made by any planning/public authority in relation to the waste water works, a copy of that determination and any screening report and NIS, and any supplemental information furnished in relation to any such report or statement, which has been provided to the planning/public authority for the purposes of the Appropriate Assessment, shall be included in Attachment B.6.

Attachment included	Yes	No
	X	

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
		×

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

B.7 (iii) Other Relevant Water Services Authorities

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

Name:	N/Actt_wite	
Address:	itis att.	
	FORTH	
	A CO	
Tel:	cetti comment of the	
Fax:	Copr	
e-mail:		

Relevant Authority Notified	Yes	No

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

Attachment inclu	led	Yes	No
	The second of th	1.01 1.01 1.02 1.03	

B.8 Notices and Advertisements

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

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Attachment B.8 should contain a copy of the site notice and an appropriately scaled drawing (\leq A3) showing its location. The original application must include the original page of the newspaper in which the advertisement was placed. The relevant page of the newspaper containing the advertisement should be included with the original and one (1) copy of the application.

Attachment included			Yes	No
Programme Annual Programme			X	

B.9 (i) Population Equivalent of Agglomeration

TABLE B.9.1 POPULATION EQUIVALENT OF AGGLOMERATION

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

Population Equival	ent		 635
Data Compiled (Ye	ar)	-	 2010
Method			Consultant
			 report

2.1 Current WWTP Loading

At present the existing Ballygarvan WWTP treats the wastewater discharged from 135 houses within the Bride View Developments housing estates of Gleann Rua (36), Gleann Dara (32) and Gleann Alainn (66) as well as the wastewater discharged from the local school and some commercial units.

The 2006 Census recorded an average of 2.9 persons per private household in Cork County (occupancy of 2.6 in Cork City). Application of this occupancy rate for Ballygarvan would yield a population of 392 persons in the Bride View Developments estates. A wastewater flow of 160 l/hd/day is considered appropriate for such new residential development.

The local primary school currently has 265 students enrolled and has a staff of 13. The wastewater loading generated by the school corresponds to a population equivalent of 93 pe (based on 20 g BOD/hd/day and 40 l/hd/day for non-residential schools with no canteen as set out in the EPA manual "Treatment Systems for Small Communities, Business, Leisure centres and Hotels"). Similarly allowing for a nominal occupancy of 20 in the crèche, its wastewater discharge corresponds to a population equivalent of 7 pe.

In addition, there are 4 commercial units/offices plus the local shop (temporarily closed) discharging to the WWTP. The wastewater flow and BOD loading generated by these is calculated based on the recommended wastewater loading rates from offices as set out in the EPA manual "Treatment Systems for Small Communities, Business, Leisure centres and Hotels". Allowing for an average occupancy of 3 people

for 8 hours per day in each of these the occupancy of 15 corresponds to a population equivalent of 5 pe (based on 20 g BOD/hd/day and 30 l/hd/day).

2.2 Proposed WWTP Loading

The existing school is to be replaced by a new school constructed across the road and connected to the sewers discharging to the WWTP. The new school will have a student population of 480 with a staff of 20. This will increase the occupancy of the school by 222

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corresponding to an additional wastewater flow and load 4.44 kg BOD/day and 8.88 m3/day and approximately 74 pe.

Consideration is also to be given to the treatment of the wastewater generated by 12 existing properties near the crossroads and the school, as well as from the adjacent area (R-02) zoned for medium density residential development. The latter is an area of 0.4 Ha, and the appropriate housing density for this area is

12-25 housing units per Ha (Carrigaline Electoral Area Local Area Plan 2005). At a density of 25 per Ha, this area would accommodate up to 10 houses. At an occupancy rate of 2.9 people per household, these 22 additional houses would add a further wastewater loading of approximately 64 pe to be treated at the upgraded plant.

The future load to be treated at the upgraded WWTP is set out in the following table (Table 2.2).

281218/N/R/01/A 14 September 2010

Ballygarvan Waste Water Treatment Plant Upgrade

Table 2.2 - Future Wastewater Flows & Loads to the WWTP

Contributor	PE BOD	Flow	
	kg/day	ym3/day	
Current Loading	49629.78	99.89	
Additional school loading	74 4.44	8.88	
Additional existing residential	35 2.10	5.60	
Future residential development (R-02)29 1.74	4.64	
Additional Infiltration	132-	6.90	.3
Total	63438.06	125.91	atheri

B.9 (ii)

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

- information on the calculated population equivalent (p.e.) to be contributed to the waste water works as a result of those planning permissions granted,
- the percentage of the projected p.e. to be contributed by the non-domestic activities, and
- the ability of the waste water works to accommodate this extra hydraulic and organic loading without posing an environmental risk to the receiving water habitat.

Surveys undertaken in 2010 indicate that there are no vacant units in the village and there are currently no significant outstanding planning permissions. - Carrigaline Local Area plan (Ballygarvan) 2010.

B.9 (iii) **FEES**

State the relevant Class of waste water discharge as per Column 1 of the Second Schedule, and the appropriate fee as per Columns 2 or 3 of the Third Schedule of the Waste Water Discharges (Authorisation) Regulations 2007, as amended.

Class of waste water discharge	Fee (in €)	Carlo Le : 18:78 (

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Appropriate Fee Included	Yes	No

B.10 Capital Investment Programme

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

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

Attachment included	Yes	No

B.11 Significant Correspondence

Provide a summary of any correspondence resulting from a Section 63 notice issued by the Agency in relation to the waste water works under the Environmental Protection Agency Acts, 1992 to 2011.

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

Attachment included		S COL	Yes	No
	nsent	,		

B.12 Foreshore Act Licences.

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

Attachment B.12 should contain the most recent licence issued under the Forsehore 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,

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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.

The system is comprised of the following:

- Inlet screening
- Inlet pumps
- Anoxic tanks
- Aeration tanks
- Filtered pumps
- Tertiary Filter
- Monitoring chamber / Outlet

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.

There is no Storm Water overflow at this facility.

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.

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.

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Attachment included			Yes	I NO I
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C.2 Outfall Design and Construction

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

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

Attachment included	Yes	No



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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 emissions are made or are to be made.

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

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

D.1

Discharges to Surface Waters difference of all discharges Details of all discharges of waste water from the agglomeration should be following supplied via the 💉 web based http://78.137.160.73/epa wwo licensing/. Tables D.1(i)(a), (b) & (c), should be completed for the primary discharge point from the agglomeration and Tables D.1(ii)(a), (b) & (c) should be completed for **each** secondary discharge point, where relevant. Table 1.1(iii)(a) should be completed for each storm water overflow. Individual Tables must be completed for each discharge point.

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

Supporting information should form Attachment D.1

Attachment included	Yes	No
	×	

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D.2 Tabular Data on Discharge Points

Applicants should submit the following information for each discharge point:

Table D.2:

PT_CD	PT_TYPE	LA_NAME	RWB_TYPE	RWB_NAME	DESIGNATION	EASTING	NORTHING
BGV NSW 1	Primary	CORK COUNTY COUNCIL	River	Owebabue	None	168,338	63,189

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 E.1(i) 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 E.1(ii) 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 meters.

E.2. Monitoring and Sampling Points

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.

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

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equipment calibration, equipment maintenance and data recording/reporting procedures to be carried out in order to ensure accurate and reliable monitoring.

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

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

Attachment included	Yes	No
	×	-

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E.3. Tabular data on Monitoring and Sampling Points

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

PT_CD	PT_TYPE	MON_TYPE	EASTING	NORTHING	VERIFIED
aSW01d	DOWN STREAM SAMPLING	ALL ARE SAMPLING POINTS	168,429	063,232	Yes
aSW01u	UPSTREAM SAMPLING POINT		166,005	062,536	Yes
SW1	EFFLUENT		166332	063,196	Yes

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

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

Attachment E.4 should contain any supporting information.

	Attachment included	Yes	No
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SECTION F: EXISTING ENVIRONMENT & IMPACT OF THE DISCHARGE(S)

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

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

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

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

- o Give summary details and an assessment of the impacts of any existing or proposed emissions on the environment, including environmental media other than those into which the emissions are to be made.
- o Details of all monitoring of the receiving water should be supplied via the following web based link: http://78.137.160.73/epa_wwd_licensing/. Tables F.1(i)(a) & (b) should be completed for the primary discharge point. Surface water monitoring locations upstream and downstream of the discharge point shall be screened for those substances listed in Tables F.1(i)(a) & (b). Monitoring of surface water shall be carried out at not less than two points, one upstream from the discharge location and one downstream.

F.1.3 Provide an evaluation of the discharge in relation to the objective of the water quality management plan and catchment plan, as applicable.

(i) The number of dilutions available in the receiving water body.

Information available:

DWF in River = 0.141m3/sec 95%ile Flow in River = is 0.349 m3/sec Median Flow in River = 1.394m3/sec DWF from the WWTP is 0.0015 m3/sec Max flow from WWTP = 0.0019m3/sec

Worst Case Scenario

No. of Dilutions = DWF in River Max flow from WWTP No. of Dilutions = 0.141

0.0019

No. of Dilutions = 74.2

Normal Scenario

No. of Dilutions = Median Flow in River DWF from WWTP

No. of Dilutions = 1.3940.0015

No. of Dilutions = 929

Plenty of dilution available

For a 700PE plant

Jon other trees and other tree. 700 people multiplied by 180litres per day per person

DWF= 180m3/day This is DWF = 0.0020 m3/sec

Worst Case Scenario

No. of Dilutions = DWF in River Max flow from WWTR

No. of Dilutions = 0.1410.0019

No. of Dilutions = 74.2

Normal Scenario

No. of Dilutions = Median Flow in River 3xDWF from WWTP

No. of Dilutions = 1.3940.0045

No. of Dilutions = 309.77

 $3 \times DWF = 0.0045 \text{m} 3/\text{sec}$

Plenty of dilution available at this location

F.1.4 Laboratory Monitoring and Analysis

(i) With regard to the requirements of the UWWT Directive/Regulations, clarify the proposed frequency of monitoring of the final discharge.

The 2011 UWW monitoring results are attached.

The Urban Wastewater Treatment Regulations 2001 does not stipulate a frequency of monitoring per year for this category of plant (below 2000PE). The EPA require that 6 samples per year are collected from all agglomerations above 500 PE however this is not directly stated in the directive. Cork County Council comply with this requirement.

Cork County Council has and continues to comply with this required frequency of testing.

(ii) Clarify if the composite sampling of the primary discharge is time or flow proportional.

The composite sampler is time proportional.

The influent waste water to the plant in Ballygarvan for the development is sampled on a monthly basis by the plant operator. Refer to attached results

F.1.5 Assessment of the Impact of Waste Water Discharges on Receiving Waters

Table below summarises the assimilative capacity calculations using the current WWTP loading, 95%ile river flow and the water quality standards in the Environmental Objectives Regulations 2009.

Th	e Notional	values	for	the sbackground
co	ncentrations			as of for the
1	ВС	D	117	1.2 mg/l
2	OPC)4-P	11 P 12	0.005 mg/l
3	Ammo	nia-N 🔊	WILL	0.014mg/l

For the purposes of this assessment, the discharge is mass balanced into a hypothetically (notionally) clean stretch of river in order to gauge the theoretical impact of the discharge on a clean stretch of river. Details of the assimilative capacity calculations using actual background concentrations have not been included as there is a small number of results available that indicate issues with discharges upstream of the agglomeration. The 'notional clean river' approach (formulated by the Office of Environmental Assessment) has been taken, whereby other sources of upstream pollution will be dealt with separately, and the WWTP discharge shall not cause deterioration in the water quality status.

Information collected from the Scientific Officer of the Environmental Protection Agency Office of Environmental Assessment gives a value of 0.61m3/s for Belgooly River mean flow (the 50%tile value for station 20009 Belgooly is The source of this information which is located on Stick river at E166323 N53990)

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PREDICTED IMPACTS

MASS BALANCE EQUATIONS FOR BOD:

Worst Case Scenario:

Maximum Discharge, 95% Flow in the River, Maximum BOD in Discharge.

Flow of River (95%ile) = 0.349m³/sec Notional Mean BOD in River (upstream) = 1.2mg/L Max volume of discharge = 0.0019m³/sec Max value for BOD in discharge = 25mg/L

Cfinal = (flow in river x BOD in river) + (volume of discharge x BOD in discharge)

(flow in river + average volume of discharge)

 $C_{final} = (0.349 \times 1.2) + (0.0019 \times 25)$ (0.349 + 0.0019)

C_{final} = 1.325mg/I BOD

This does not breach the 1.5 - 2.6mg/L 95%ile EQS for BOD

Normal Scenario:

Normal Discharge,, 95% Flow in the River, Maximum BOD in Discharge.

Flow of River (95%ile) = 0.349m³/sec Notional Mean BOD in River (upstream) = 1.2mg/L volume of discharge = 0.0015m³/sec Max value for BOD in discharge = 25mg/L

 $C_{final} = (0.349 \times 1.2) + (0.0015 \times 25)$ (0.349 + 0.0015)

C_{final} = 1.299mg/I BOD

This meets the 1.5mg/L and 2.6mg/l mean and 95% EQS for BOD This is the predicted situation and the EQS standard is not breached

Normal Scenario: with 700PE 180litres @700PE

Normal Discharge,, 95% Flow in the River, Maximum BOD in Discharge.

Flow of River (95%ile) = 0.349m³/sec Notional Mean BOD in River (upstream) = 1.2mg/L Max volume of discharge = 0.0019m³/sec Max value for BOD in discharge = 25mg/L

 $C_{\text{final}} = (0.349 \times 1.2) + (0.0019 \times 25)$ (0.349 + 0.0019)

C_{final} = 1.325mg/I BOD

This is the predicted situation for 1000PE and the EQS standard is not breached

MASS BALANCE EQUATIONS FOR AMMONIA:

C_{fina} = (Flow in river xAmmonia in river) + (Volume of Discharge x Ammonia in discharge)

(Flow in river + Average Volume of Discharge)

Worst Case Scenario:

Maximum Discharge, Median Flow in the River, Maximum Ammonia in Discharge.= 0.014 95%ile Flow in the River = 0.349 Maximum Ammonia in Discharge = 30mg N/L

$$C_{final} = (0.349 \times 0.014) + (0.0019 \times 30.0)$$

(0.349 + 0.0019)

This is 0.1673 which is in breach of the 0.14mg/L 95%ile EQS for Ammonia as shown in table 9 under Good status

$$C_{\text{final}} = \underline{(0.349 \times 0.014) + (0.0019 \times 20)}$$

 $(0.349 + 0.0019)$

 $C_{final} = 0.1222$ mg/l Ammonia which is not breach of the 0.14mg/L 95%ile EQS for Ammonia

$$C_{\text{final}} = \underline{(0.349 \times 0.014) + (0.0019 \times 23)}$$

 $(0.349 + 0.0019)$

C_{final} = 0.1385mg/l Ammonia which is not breach of the 0.14mg/L 95%ile EQS for Ammonia

MASS BALANCE EQUATIONS FOR ORTHOPHOSPHATE: Use median flow

Maximum Volume of Discharge, Median Flow in the River, Maximum Orthophosphate in Discharge.

Median Flow of River (50%ile) = 1.349m3/sec

Mean Orthophosphate in River (upstream) = 0.05mg/l (This is an average of 0.0200 and 0.0975)

Max volume of discharge = 0.0019m3/sec Max value for Orthophosphate in discharge = 0.91mg/L

C final = (flow in river X Ortho. in river) + (volume of discharge x Ortho. in discharge)
(flow in river + max volume of discharge)

C final = $(1.394 \times 0.05) + (0.0019 \times 6.5)$ (1.394 + 0.0019)

C final = 0.058mg/l Orthophosphate

This meets the 0.075mg/L 95%ile EQS for Orthophosphate

Recent Upgrade works completed June 2011 at Ballygarvan WWTP

- (m) Provide further details of any work necessary to meet relevant effluent discharge standards and a timeframe and schedule for such works. The response should include:
 - (i) Details of the programme of improvements to ensure that discharges other than the primary and secondary discharges comply with the DoEHLG guidance on Storm Water Overflows. Include the proposed timeframe for compliance with the DoEHLG guidance.

Prior to recent upgrade works on Ballygarvan Wastewater Treatment Plant, the plant generated intermittent odours that caused nuisance to the adjacent residents. Performance monitoring results received from CCC Environmental Directorate indicated that the plant was not performing as required by the Wastewater Discharge Licence.

Recently completed upgrade works to the plant include:

Inlet Screening, chamber

Modifications to inlet pumping arrangement, chamber and pipework

Anoxic tank (32 m3), mixer and associated civil works.

- Replacement diffused air system in both tanks, plus provision of nitrified liquor return pumps, pipework, sump, portable DO meter and controls.
- New sludge return system including pumps, pipework, sump and controls, plus modifications to existing system.
- New ferric dosing pump, pipework and ducting, emergency shower system relocation of existing dosing pump.
 - o For discharges from secondary discharge points Tables F.1(ii)(a) & (b) should be completed. Furthermore, provide summary details and an assessment of the impacts of any existing or proposed emissions on the surface water or ground (aquifers, soils, sub-soils and rock environment), including any impact on environmental media other than those into which the emissions are to be made.

No Secondary Discharge Point

o Provide details of the extent and type of ground emissions at the works. For larger discharges to groundwaters, e.g., from Integrated Constructed Wetlands, large scale percolation areas, etc., a comprehensive report must be completed which should include inter alia, topography, data, water quality seology, hydrology, and meteorological The latter must in particular present the aquifer hydrogeology. classification and vulnerability. The Geological Survey of Ireland Groundwater Protection Scheme Sept of the Environment and Local Government, Geological Survey of Ireland, EPA (1999) methodology should be used for any such classification. This report should also identify all surface water bodies and water wells that may be at risk as a result of the ground discharge.

There is no drinking water abstraction point down stream of the Ballygarvan WWTP primary discharge point

- Describe the existing environment in terms of water quality with particular reference to environmental quality standards or other legislative standards. Submit a copy of the most recent water quality management plan or catchment management plan in place for the receiving water body. Give details of any designation under any Council Directive or Regulations that apply in relation to the receiving water.
- Provide a statement as to whether or not emissions of main polluting substances (as defined in the *Dangerous Substances Regulations S.I. No.* 12 of 2001) to water are likely to impair the environment.

Domestic Only – Tested for priority substances but will be submitted at a later date. However, it is not expected to produce dangerous substances

 In circumstances where water abstraction points exist downstream of any discharge describe measures to be undertaken to ensure that discharges from the waste water works will not have a significant effect on faecal coliform, salmonella and protozoan pathogen numbers, e.g., Cryptosporidium and Giardia, in the receiving water environment. There is no drinking water abstraction point down stream of the Ballygarvan WWTP primary discharge point

o 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 European Site, as defined in Regulation 2(1) of the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. No. 477 of 2011).

Undertake a screening for Appropriate Assessment and state whether the discharge(s), whether individually or in combination with other plans or projects is likely to have a significant effect on a European Site(s), in view of best scientific knowledge and in view of the conservation objectives of the site(s). Where it cannot be excluded, on the basis of objective scientific information, following screening for Appropriate Assessment, that the discharge(s), either individually or in combination with other plans or projects, will have a significant effect on a European Site, the applicant shall provide a Natura Impact Statement, as defined in Regulation 2(1) of the European Communities (Birds and Natural Habitats) Regulations (S.I. No. 477 of 2011). Where based on the screening it is considered that an Appropriate Assessment is not required, a reasoned response should be provided.

Provided - No impacts

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

Not applicable = 3km to coastal waters and not entering other Local Authorities.

o This section should also contain full details of any modelling of discharges from the agglomeration. Full details of the assessment and any other relevant information on the receiving environment should be submitted as **Attachment F.1.** - **Not Required**

Attachmen	t included		Yes	No
		İ	-	x ·

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.

There is no drinking water abstraction point down stream of the Ballygarvan WWTP primary discharge point

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

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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 (79/923/EEC).

Recently completed upgrade works to the plant include:

- Inlet Screening, chamber
- Modifications to inject pumping arrangement, chamber and pipework
- Anoxic tank (32 m3), mixer and associated civil works.
- Replacement diffused air system in both tanks, plus provision of nitrified liquor return pumps, pipework, sump, portable DO meter and controls.
- New sludge return system including pumps, pipework, sump and controls, plus modifications to existing system.
- New ferric dosing pump, pipework and ducting, emergency shower system relocation of existing dosing pump.

Future Improvements

- Automatic tertiary filter with feed pumps, washing and compressed air system pipework and fittings, support plinth and sump
- Modifications to existing control panel and kiosk, new panel, weatherproof kiosk and wiring of new equipment.

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.

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Attachment included	Yes	No
		X

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).

# ·	Inlet Screening, chamber
	Modifications to inlet pumping arrangement, chamber and pipework
3	Anoxic tank (32 m3), mixer and associated civil works.
<u> </u>	Replacement diffused air system in both tanks, plus provision of
	nitrified liquor return pumps, pipework, sump, portable DO meter and controls.
蒙	New sludge return system including pumps, pipework, sump and controls, plus modifications to existing system.
E.	New ferric dosing pump, pipework and ducting, emergency shower system relocation of existing dosing pump.
	A = 3

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
		х

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 programme of improvement works has taken the following into consideration:

- > Grit Screening
- > Storm Holding Tank
- > Inlet Flow Measurement Chamber
- Extended Aeration Tanks
- > Clarifier
- > Final Effluent Flow Measurement Chamber
- 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
	A STATE OF THE STA		x

G.4 Storm Water Overflow

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

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 in	cluded	Yes	No
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Declaration

I hereby make application for a waste water discharge licence/revised licence, pursuant to the provisions of the Waste Water Discharge (Authorisation) Regulations, 2007 as amended.

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 :	authorities	Date :
(on behalf of the organisation)	ection tries	
Print signature name:	to Trighto	
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SECTION H:

DECLARATION

Declaration

I hereby make application for a waste water discharge licence/revised licence, pursuant to the provisions of the Waste Water Discharge (Authorisation) Regulations, 2007 as amended.

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: County Engineer

Gel O'Keet

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Consent of copyright owner required for any other use.

SECTION I: JOINT DECLARATION

Joint Declaration Note1

I hereby make application for a waste water discharge licence/revised licence, pursuant to the provisions of the Waste Water Discharge (Authorisation) Regulations, 2007 as amended.

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	. Use.
Signed by:	Date :
(on behalf of the organisation)	-
Print signature name:	
Position in organisation:ilight difference	
Co-Applicants Reference	
Signed by: (on behalf of the organisation)	Date :
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Signed by :(on behalf of the organisation)	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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