

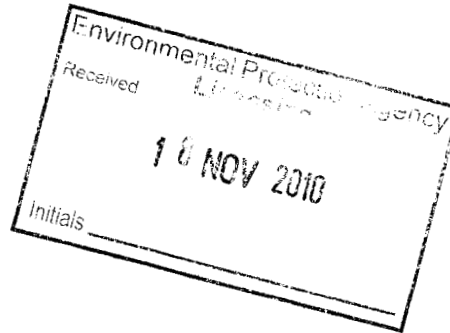
Comhairle Contae Chorcaí Cork County Council

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

A0438-01



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



Our Ref.: MS/Dung/1209

22 December 2009

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

Dear Sir/Madam,

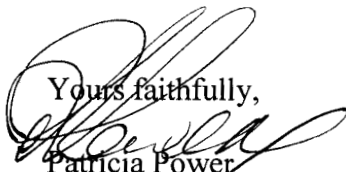
Please find enclosed the waste water discharge license application
for the agglomeration of Dungourney Village in County Cork.

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

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

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

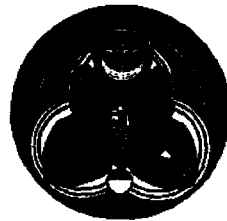
Yours faithfully,


Patricia Power
Director of Services



Comhairle Contae Chorcaí Cork County Council

Environmental Directorate,
Inniscarra, Co. Cork.
Tel. No. (021) 4532700 • Fax No. (021) 4532727
Web: www.corkcoco.ie
An Stiúrthóireacht Comhshaoil,
Inis Cara, Co. Corcaigh.
Fón: (021) 4532700 • Faisc: (021) 4532727
Suíomh Gréasáin: 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.

16th December, 2009

Re: Waste Water Discharge (Authorisation) Regulations 2007 – fees payable in respect of applications to be submitted by 22nd 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 22nd December next.

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 € 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





Waste Water Discharge Certificate of Authorisation Application Form

For inspection purposes only.
Consent of copyright owner required for any other use.

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

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



Tracking Amendments to Draft Application Form

Version No.	Date	Amendment since previous version	Reason
V. 1.	23/03/09	N/A	

*For inspection purposes only.
Consent of copyright owner required for any other use.*



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

CONTENTS

	Page
ABOUT THIS APPLICATION FORM	4
PROCEDURES	5
SECTION A: NON-TECHNICAL SUMMARY	7
SECTION B: GENERAL	10
SECTION C: INFRASTRUCTURE & OPERATION	17
SECTION D: DISCHARGES TO THE AQUATIC ENVIRONMENT	19
SECTION E: MONITORING	21
SECTION F: EXISTING ENVIRONMENT & IMPACT OF THE DISCHARGE(S)	23
SECTION G: PROGRAMMES OF IMPROVEMENTS	32
SECTION H: DECLARATION	35
SECTION I: JOINT DECLARATION	36

For inspection purposes only.
Consent of copyright owner required for any other use.

ABOUT THIS APPLICATION FORM

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

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

A valid application for a Waste Water Discharge Certificate of Authorisation must contain the information prescribed in the Waste Water Discharge (Authorisation) Regulations, 2007 (S.I. No. 684 of 2007). Regulation 24 of the Regulations sets out the statutory requirements for information to accompany a Certificate of Authorisation application. The application form is designed in such a way as to set out these questions in a structured manner and not necessarily in the order presented in the Regulations. In order to ensure a legally valid application with respect to Regulation 24 requirements, please complete the Regulation 24 Checklist provided in the following web based tool: http://78.137.160.73/epa_wwd_licensing/.

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

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

PROCEDURES

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

An application for a Certificate of Authorisation must be submitted on the appropriate form (available from the Agency website – <http://www.epa.ie/whatwedo/licensing/wwda/>) with the correct fee, and should contain relevant supporting documentation as attachments. The application should be based on responses to the form and include supporting written text and the appropriate use of tables and drawings. Where point source emissions occur, a system of unique reference numbers should be used to denote each discharge point. These should be simple, logical, and traceable throughout the application.

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

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

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

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

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

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

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

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

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

For inspection purposes only.
Consent of copyright owner required for any other use.

SECTION A: NON-TECHNICAL SUMMARY

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

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

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

A description of:

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

Supporting information should form **Attachment N^o A.1**

Dungourney is a small village located 7 miles north east of Middleton Town off the R627 road . Dungourney existing sewerage treatment system is serving population equivalent of 75 . The receiving water body of the Dungourney septic tank is the Dungourney River Hydrometric Area 19 (Lee – Cork Harbour – Youghal Bay). All effluent from septic tank discharges directly into the Dungourney river, there are no discharges to groundwater or any other media. The Dungourney is the main tributary of the Owenacurra River and has 5 EPA biological monitoring sites. The main pressures on the river are agricultural and forestry in the upper reaches and IPC Irish Distillers in the lower stretches. The Dungourney joins the Owenacurra River at the Owenacurra Estuary at which point waters become tidal.

The Waste Water Works and the activities carried out therein.

The sewerage network in Dungourney comprises of one catchment area serving approximately 22 houses and the village

school with the Waste water discharges into the nearby Dungourney River.

The septic tank is currently operated by Cork County Council.

The existing system comprises the following;

- Inlet
- A total of 0.45 km of 150 mm Concrete pipe
- 5 manholes
- One Septic Tank(Capacity 42m³ approx.)
- Outlet to River

When the tank was built in the 1950s the PE contributing to it was far less than at present. The current PE contributing to the septic tank is approximately 75 rising to 160 during 2010. The passage of sewage through a septic tank helps in the removal of suspended solids but there is very little biological activity and the removal of BOD is not significant.

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

The sources of emissions from the waste water works.

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

- Domestic Population
- School (St. Peters National School)
- Infiltration
- Developments Under Construction of 29 houses due for completion and occupation during 2010 (22 no. dwellings for Cork County Council Housing and 7 private dwellings) . [This will alter the current load of 75 PE to 160 PE]

The sewage from all premises (75 PE) is collected via the existing sewer network and is treated in conjunction with the domestic waste at the Septic tank. The septic tank does not receive any other sludge imported from other municipal waste water sources or septic tanks.

The nature and quantities of foreseeable emissions from the waste water works into the receiving aqueous environment

As well as identification of significant effects of the emissions on the environment the final discharge is to Owenacurra River

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

Technology

New WWT Plant is in contract tendering stage with 400PE capacity .The Design & Build contract is to include outfall as well as distribution system upgrading .

Techniques

New WWT Plant is in contract tendering stage with 400PE capacity .The Design & Build contract is to include outfall as well as distribution system upgrading .

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

New WWT Plant is in contract tendering stage with 400PE capacity .The Design & Build contract is to include outfall as well as distribution system upgrading .

Measures planned to monitor emissions into the environment.

No sampling is currently carried out on the influent or effluent.

SECTION B: GENERAL

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

B.1 Agglomeration Details

Name of Agglomeration: Dungourney Village

Applicant's Details**Name and Address for Correspondence**

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

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

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

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

*Where an application is being submitted on behalf of more than one Water Services Authority the details provided in Section B.1 shall be that of the lead Water Services Authority.

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

*This should be the name of person nominated by the Water Services Authority for the purposes of the application.

Co-Applicant's Details

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

*This should be the name of a Water Services Authority, other than the lead authority, where multiple authorities are the subject of a waste water discharge Certificate of Authorisation application.

Design, Build & Operate Contractor Details

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

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

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

Attachment included	Yes	No
	x	

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

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

Name*:	Jack McCarthy
Address:	Youghal Area office, Cork County Council
	Dungourney Village
	County Cork
Grid ref (6E, 6N)	E193322 N079457
Level of Treatment	PRIMARY
Primary Telephone:	024 92365
Fax:	024 92573
e-mail:	Jack.McCarthy@corkcoco.ie

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

Attachment B.2 should contain appropriately scaled drawings / maps ($\leq A3$) of the site boundary and overall site plan, including labelled discharge, monitoring and sampling points. These drawings / maps should also be provided as geo-referenced digital drawing files (e.g., ESRI Shapefile, MapInfo Tab, AutoCAD or

other upon agreement) in Irish National Grid Projection. These drawings should be provided to the Agency on a separate CD-Rom containing sections B.1, B.3, B.4, B.5, C.1, D.2, E.3 and F.2.

Attachment included	Yes	No
		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.

Discharge to	Surface Water
Type of Discharge	Outfall to river bank
Unique Point Code	SW1DUN
Location	Dungourney Village
Grid ref (6E, 6N)	193299 E 079414 N

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

Attachment included	Yes	No
		x

B.4 Location of Secondary Discharge Point(s)

NOT APPLICABLE

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

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

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
		x

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

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

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

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

Attachment included	Yes	No
		x

B.6 Planning Authority

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

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

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

has been obtained		is being processed	
--------------------------	--	---------------------------	--

<i>is not yet applied for</i>		<i>is not required</i>	x
-------------------------------	--	------------------------	----------

Local Authority Planning File Reference N^o:	Not Applicable .
---	-------------------------

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

Attachment included	Yes	No
		x

B.7 Other Authorities

Not applicable

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

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

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

Within the SFADCo Area	Yes	No
		x

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
Address:	Áras Sláinte
	Wilton Road
	Cork
Tel:	021 4545011
Fax:	021 4927228
e-mail:	info@hse.ie

B. 8(i) Population Equivalent of Agglomeration

TABLE B.8.1 POPULATION EQUIVALENT OF AGGLOMERATION

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

Population Equivalent	75
Data Compiled (Year)	2009

Method	Site Count and checking Council documents
---------------	---

Present loading is 75 PE(domestic and school) , when all housing under construction are taken into consideration the loading will be 160 PE

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.

Cork County Council has a housing scheme under construction 15 out of 22 houses (affordable& social) are currently in construction as phase 1.planning reference is not available .

B.8 (iii) FEES

State the relevant Class of waste water discharge as per Regulation 5, and the appropriate fee as per Columns 2 or 3 of the Third Schedule of the Waste Water Discharges (Authorisation) Regulations 2007, S.I. No. 684 of 2007.

Class of waste water discharge	Fee (in €)
<500	3000

Appropriate Fee Included	Yes	No
		X*

*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 Water Services Investment Plans) 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.

A programme of work titled Dungourney Sewerage Scheme, part of the water services investment programme (WSIP) 2007-2009 was prioritised for the development of infrastructure to collect ,convey, treat and discharge waste water from the agglomeration.

A report titled Dungourney design review report is attached for reference.

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

Attachment included	Yes	No
Report	x	

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
		x

Not Applicable

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.

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.

Not Applicable

Attachment included	Yes	No
		x

For inspection purposes only. Consent of copyright owner required for any other use.

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.

The sewerage network in Dungourney comprises of one catchment area serving approximately 22 houses and the village school with the Waste water discharges into the nearby Dungourney River.

The septic tank is currently operated by Cork County Council.

The existing system comprises the following;

Inlet

A total of 0.45 km of 150 mm Concrete pipe

5 manholes

One Septic Tank(Capacity 25 m³ approx.)

Outlet to River.

When the tank was built in the 1950s the PE contributing to it was far less than at present. The current PE contributing to the septic tank is approximately 75. On completion of the houses under construction the PE is expected to increase to 160. 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 increase in PE will be coupled with the construction of a new WWTP(Detail in Part G)

C.1.1 Storm Water Overflows

Not found .

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

Not Applicable.

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.

Attachment included	Yes	No
		x

For inspection purposes only.
Consent of copyright owner required for any other use.

SECTION D: DISCHARGES TO THE AQUATIC ENVIRONMENT

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

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

Details of all discharges of waste water from the agglomeration should be submitted via the following web based link: http://78.137.160.73/epa_wwd_licensing/. The applicant should address in particular all discharge points where the substances outlined in Tables 'Emissions to Surface/Groundwaters and 'Dangerous Substances Emissions' are emitted

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

D.1(i) Discharges to Surface Waters

Details of all discharges of waste water from the agglomeration should be supplied via the following web based link: http://78.137.160.73/epa_wwd_licensing/. Tables 'Discharge Point Details', 'Emissions to Surface/Groundwaters and 'Dangerous Substances Emissions', should be completed for the primary discharge point from the agglomeration and for **each** secondary discharge point, where relevant. Table 'Discharge Point Details' should be completed for **each** storm water overflow. Individual Tables must be completed for each discharge point.

Where monitoring information is available for the influent to the waste water treatment plant this data should also be provided in response to Section D.1(i).

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

Attachment included (online data)	Yes	No
	x	

D.1(ii) Discharges to Groundwater

Not Applicable

Details of all discharges of waste water from the agglomeration should be supplied via the following web based link: http://78.137.160.73/epa_wwd_licensing/. Tables 'Discharge Point Details', 'Emissions to Surface/Groundwaters and 'Dangerous Substances Emissions', should be completed for the primary discharge point from the agglomeration and for **each** secondary discharge point, where relevant. Table 'Discharge Point Details' should be completed for **each** storm water overflow Individual Tables must be completed for each discharge point.

Where monitoring information is available for the influent to the waste water treatment plant this data should also be provided in response to Section D.1(ii).

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

Attachment included	Yes	No
		x

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
SW1 DUN	Primary	Cork County Council	River	River Dungourne y	None	19329 9	079414

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

SECTION E: MONITORING

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

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

Provide an estimation of the quantity of waste water likely to be emitted in relation to all primary and secondary discharge points applied for. This information should be included in Table 'Discharge Point Details' via the following web based link: http://78.137.160.73/epa_wwd_licensing/.

Provide an estimation of the quantity of waste water likely to be emitted in relation to all storm water overflows within the agglomeration applied for. This information should be included in Table 'Discharge Point Details' via the following web based link: http://78.137.160.73/epa_wwd_licensing/.

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

E.2. Monitoring and Sampling Points

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

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

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

Details of any accreditation or certification of analysis should be included.

Attachment E.2 should contain any supporting information

There is no monitoring system in place to monitor existing Septic Tank in this location . For the purposes of this application samples were collected and tested by the Environmental Directorate of Cork County Council.

Attachment included	Yes	No
	x	

E.3. Tabular data on Monitoring and Sampling Points

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

PT_CD	PT_TYPE	MON_TYPE	EASTING	NORTHING	VERIFIED
SW1	Primary	S = Sampling	193323	079454	N = GPS not used

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

E.4 Sampling Data

Regulation 24(i) of the Waste Water Discharge (Authorisation) Regulations 2007 requires all applicants in the case of an existing discharge to specify the sampling data pertaining to the discharge based on the samples taken in the 12 months preceding the making of the application.

Regulation 24(m) requires applicants to give details of compliance with any applicable monitoring requirements and treatment standards.

Attachment E.4 should contain any supporting information.

Attachment included	Yes	No
	x	

For inspection purposes only. Consent of copyright owner required for further use.

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

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

Clear and concise information is required to enable the Agency to assess the existing receiving environment. This section requires the provision of information on the ambient environmental conditions within the receiving water(s) upstream and downstream of any discharge(s) and/or the ambient environmental conditions of the groundwater upgradient and downgradient of any discharges.

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

F.1. Impact on Receiving Surface water or Groundwater

- Details of monitoring of the receiving surface water should be supplied via the following web based link: http://78.137.160.73/epa_wwd_licensing/. Tables 'Monitoring Details', 'Monitoring Test Details', 'Dangerous Substances Monitoring Details' and 'Dangerous Substances Monitoring Test Details' should be completed for the primary discharge point. Surface water monitoring locations upstream and downstream of the discharge point shall be screened for those substances listed in Tables 'Monitoring Details', 'Monitoring Test Details', 'Dangerous Substances Monitoring Details' and 'Dangerous Substances Monitoring Test Details'. Monitoring of surface water shall be carried out at not less than two points, one upstream from the discharge location and one downstream.
- Details of monitoring of the receiving ground water should be supplied via the following web based link: http://78.137.160.73/epa_wwd_licensing/. Tables 'Monitoring Details', 'Monitoring Test Details', 'Dangerous Substances Monitoring Details' and 'Dangerous Substances Monitoring Test Details' should be completed for the primary discharge point. Ground water monitoring locations upgradient and down gradient of the discharge point shall be screened for those substances listed in Tables 'Monitoring Details', 'Monitoring Test Details', 'Dangerous Substances Monitoring Details' and 'Dangerous Substances Monitoring Test Details'. Monitoring of ground water shall be carried out at not less than two points, one upgradient from the discharge location and one downgradient.
- For discharges from secondary discharge points Tables 'Monitoring Details', 'Monitoring Test Details', 'Dangerous Substances Monitoring Details' and 'Dangerous Substances Monitoring Test Details' should be completed.
- Describe the existing environment in terms of water quality with particular reference to environmental quality standards or other legislative standards. Submit a copy of the most recent water quality management plan or catchment management plan in place for the receiving water body. Give details of any designation under any Council Directive or Regulations that apply in relation to the receiving surface or groundwater.

- Provide a statement as to whether or not emissions of main polluting substances (as defined in the *Dangerous Substances Regulations S.I. No. 12 of 2001*) to water are likely to impair the environment.
- In circumstances where 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.
- Indicate whether or not emissions from the agglomeration or any plant, methods, processes, operating procedures or other factors which affect such emissions are likely to have a significant effect on –
 - (a) a site (until the adoption, in respect of the site, of a decision by the European Commission under Article 21 of Council Directive 92/43/EEC for the purposes of the third paragraph of Article 4(2) of that Directive) –
 - (i) notified for the purposes of Regulation 4 of the Natural Habitats Regulations, subject to any amendments made to it by virtue of Regulation 5 of those Regulations,
 - (ii) details of which have been transmitted to the Commission in accordance with Regulation 5(4) of the Natural Habitats Regulations, or
 - (iii) added by virtue of Regulation 6 of the Natural Habitats Regulations to the list transmitted to the Commission in accordance with Regulation 5(4) of those Regulations,
 - (b) a site adopted by the European Commission as a site of Community importance for the purposes of Article 4(2) of Council Directive 92/43/EEC¹ in accordance with the procedures laid down in Article 21 of that Directive,
 - (c) a special area of conservation within the meaning of the Natural Habitats Regulations, or
 - (d) an area classified pursuant to Article 4(1) or 4(2) of Council Directive 79/409/EEC²;

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

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

Existing Environment

The receiving water body of the Dungourney septic tank is the Dungourney River Hydrometric Area 19 (Lee – Cork Harbour – Youghal Bay). All effluent is discharged to the Dungourney River there are no discharges to ground water or any other media.

The Dungourney is the main tributary of the Owenacurra River and has 5 EPA biological monitoring sites. The main pressures on the river are agricultural and forestry in the upper reaches and IPC Irish Distillers in the lower stretches. The Dungourney joins the Owenacurra River at the Owenacurra Estuary at which point waters become tidal.

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.

EPA station 0200 Bridge south west of Rathorgan, is located approximately 3.7km up-stream of Dungourney primary discharge point. Water quality at this station has alternated between Q3-4 and Q4 for the last number of years. A Q-value of 4 was recorded at this point in 2008. The Q-value results are shown in **Table F1.1**.

EPA station 0500 at bridge down-stream of Dungourney, is located approximately 4km downstream of the Dungourney primary discharge point. Water quality at this station has had a value of Q4 since 2005. The Q-value results are shown in **Table F1.1**.

Biological Quality Ratings (Q Values)							
Station Nos.	1988	1994	1997	1999	2003	2005	2008
0200	4	4	4	3-4	4	3-4	4
0500	4	4	4-5	4-5	4-5	4	4

Table F.1.1.

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

Water Quality Standards

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

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

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

Areas of Conservation

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

Special Areas of Conservation

There are no SACs designated for the Dungourney River however it discharges to Owenacurra Estuary which is a designated Special Area of Conservation (SAC), The Great Island Channel SAC (site code 001058). The SAC is located over 11.5km from the Dungourney Primary discharge point. The Great Island Site Synopsis is included in **Attachment F.1**.

Natural Heritage Areas

There are no Natural Heritage Areas designated for the Dungourney River however it discharges to the Owenacurra Estuary which is a proposed National Heritage Area. This pNHA is located approximately 11.5km from the primary discharge point. Under the Wildlife Amendment Act 2000, NHAs are legally protected from damage from the date they are formally proposed for designation. National Heritage Areas are the basic designation for wildlife. An NHA is an area considered important for the habitats present or which holds species of plants and animals whose habitat needs protection.

Special Protection Areas

Special Protection Areas (SPAs) are designated in order to safeguard certain habitats pursuant to EU Directive requirements. The EU Birds Directive (79/409/EEC) requires designation of SPAs for listed rare and vulnerable species, migratory species and wetlands. There are no Special Protection Areas designated for the Dungourney River however Owenacurra Estuary is a designated SPA. This designated SPA is located approximately 11.5km from the primary discharge point.

Surface Water Directive

There are no surface water abstraction points on the Dungourney River. Consequently the provisions of the Surface Water Directive do not directly apply.

Groundwater Directives

The Groundwater Directives (80/778/EEC) does not apply, as there are no discharges to ground in the current operation.

Bathing Water Directive

The Bathing Water Regulations 1992 (SI No. 155 of 1992), lay down quality requirements for inland and coastal waters as designated bathing areas. There are no designated inland bathing areas in the Dungourney River nor are there any designated beaches in Cork Harbour. Consequently Directive 76/160/EEC does not directly apply.

EU Shellfish Waters Directive

EU Shellfish Waters Directive (79/923/EEC) on the quality required by shellfish waters, EU Directive on Health Conditions and the placing of Live Molluscs (91/67/EEC) and the associated Quality of Shellfish Waters Regulations 1994 (SI No. 200 of 1994) specify designated coastal and brackish waters needing protection or improvement in order to support shellfish. Specified limit values apply to these areas.

It must be noted that there is a Shellfish Designation in North Channel of Cork Harbour. The Owenacurra Estuary is located where the Owenacurra river flows into the North Channel of the Harbour. The designated area is located approx 6km west of where estuary.

A draft copy of a Pollution Reduction Plan for the North Channel is included as an attachment and it includes maps showing the designated area.

Urban Waste Water Treatment Directive

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

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

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

Phosphorus Regulations

The Local Government (Water Pollution) Act 1977 (Water Quality Standards for Phosphorus) Regulations 1998 (SI No. 258 of 1998) were introduced to counter eutrophication observed throughout Irish watercourses and also to comply with Council Directive 76/464/EEC on pollution caused by certain dangerous substances discharged into the aquatic environment.

The regulations oblige authorities to maintain or improve the quality at any part of a river by 2007 with reference to the Biological Quality Rating (Q value). The target values are shown in table F1.1.

A Biological Quality Rating of Q4 represents satisfactory water quality. Eutrophication is unlikely to occur in water bodies with a biological quality rating of Q4 or higher. A Q4 value was recorded for both the up-stream and downstream monitoring locations in 2008.

Water Framework Directive

EU Directive 2000/60/EC establishing a framework for community action in the field of water policy requires member states to restore the quality of their watercourses by 2015. In order to achieve this objective, Irish local authorities are obliged to prepare river basin management plans. A report is included in **Attachment F1.1** for the Dungourney River.

Assimilative Capacity of the Receiving Water

As no upstream sample was taken, the results from the downstream sample were used instead.

Mass Balance Equation for Orthophosphates:

Median flow of River (SWRBD) = $0.4783\text{m}^3/\text{sec}$
Median $\text{OPO}_4\text{-P}$ in River (downstream) = 0.05mg/l
Average volume of discharge = $0.00042\text{m}^3/\text{sec}$
Median value for $\text{OPO}_4\text{-P}$ in discharge = 7.0mg/l

$$C_{\text{final}} = \frac{(0.4783 \times 0.05) + (0.00042 \times 7.0)}{(0.4783 + 0.00042)}$$

$$C_{\text{final}} = 0.056\text{mg/l } \text{OPO}_4\text{-P}$$

The increase in Orthophosphate due to the discharge at Dungourney is 0.006 mg/l .

Mass Balance Equation for BOD:

Flow of River (95%ile) = $0.0736\text{m}^3/\text{sec}$
Median BOD in River (downstream) = 1.1mg/l
Average volume of discharge = $0.00042\text{m}^3/\text{sec}$

Median value for BOD in discharge = 300.0mg/l

$$C_{\text{final}} = \frac{(0.0736 \times 1.1) + (0.00042 \times 300.0)}{(0.0736 + 0.00042)}$$

$C_{\text{final}} = 2.79\text{mg/l BOD}$

The increase in BOD due to the discharge at Dungourney is 1.69mg/l.

Mass Balance Equation for Suspended Solids:

Flow of River (95%ile) = 0.0736m³/sec

Median SS in River (downstream) = 4.0 mg/l

Average volume of discharge = 0.00042m³/sec

Median value for SS in discharge = 350.0mg/l

$$C_{\text{final}} = \frac{(0.0736 \times 4.0) + (0.00042 \times 350)}{(0.0736 + 0.00042)}$$

$C_{\text{final}} = 5.96\text{mg/l Suspended Solids}$

The increase in Suspended Solids due to the discharge at Dungourney is 1.96mg/l.

Mass Balance Equation for Total Phosphates:

Median Flow of River (SWRBD) = 0.4783m³/sec

Median TP-P in River (downstream) = 0.05mg/l

Average volume of discharge = 0.00042m³/sec

Median value for TPO4-P in discharge = 12.0mg/l

$$C_{\text{final}} = \frac{(0.4783 \times 0.05) + (0.00042 \times 12)}{(0.4783 + 0.00042)}$$

$C_{\text{final}} = 0.0605\text{mg/l Total Phosphates}$

The increase in Total Phosphates due to the discharge at Dungourney is 0.0105mg/l.

Mass Balance Equation for Total Nitrogen:

Flow of River (95%ile) = 0.0736m³/sec

Median Total Nitrogen in River (downstream) = 4.23mg/l

Average volume of discharge = 0.00042m³/sec

Median value for Total Nitrogen in discharge = 85.0mg/l

$$C_{\text{final}} = \frac{(0.0736 \times 4.23) + (0.00042 \times 85)}{(0.0736 + 0.00042)}$$

$C_{\text{final}} = 4.69\text{mg/l Total Nitrogen}$

The increase in Total Nitrogen due to the discharge at Dungourney is 0.46mg/l.

Mass Balance Equation for Sulphates:

Flow of River (95%ile) = 0.0736m³/sec
Median Sulphates in River (downstream) = 30.0mg/l
Average volume of discharge = 0.00042m³/sec
Median value for Sulphates in discharge = 30.0mg/l

$$C_{\text{final}} = \frac{(0.0736 \times 30) + (0.00042 \times 30)}{(0.0736 + 0.00042)}$$

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

The increase in Sulphates due to the discharge at Dungourney is 0.0mg/l.

Mass Balance Equation for Ammonia-N:

Flow of River (95%ile) = 0.0736m³/sec
Median Ammonia in River (downstream) = 0.1mg/l
Average volume of discharge = 0.00042m³/sec
Median value for Ammonia in discharge = 60.0mg/l

$$C_{\text{final}} = \frac{(0.0736 \times 0.1) + (0.00042 \times 60.0)}{(0.0736 + 0.00042)}$$

$$C_{\text{final}} = 0.44\text{mg/l Total Ammonia}$$

The increase in Ammonia due to the discharge at Dungourney is 0.34mg/l.

- o 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
	x	

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

Not applicable

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

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

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

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

Attachment F.2 should contain any supporting information.

SECTION G: PROGRAMMES OF IMPROVEMENTS

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

G.1 Compliance with Council Directives

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

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

The provision of the new plant which is currently in the tender stage is considered an improvement programme to ensure the new facility comply with all directives above .

The proposed works shall be for a collection system and a wastewater treatment plant (WWTP) to provide treatment capacity initially for at least 400 PE, and the handling/treatment and storage facilities for the associated sludge .

The works include the construction of an outfall from the WWTP outlet to the Dungourney River.

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
		x

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

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

Provide details highlighting any waste water works that have been identified as the principal sources of pollution under the P regulations.

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
		x

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. However, the Contractor when appointed will be required to design and build the scheme in accordance with recognized principles and practices to ensure the provision of a reliable and effective facility. The construction requirement shall be for a collection system, a WWTP to provide treatment capacity for at least 400 PE including the handling/treatment and storage of the associated sludge and the construction of an outfall from the WWTP outlet to the Dungourney River. It is highly likely that the new 400 PE WWTP will include the following elements:

- Grit Removal and Screening
- Storm Holding Tank
- Inlet Flow Measurement Chamber
- Primary Settlement Tank
- Aeration Tank
- Clarifier
- Sludge Holding Tank
- Final Effluent Flow Measurement Chamber
- Disinfection system
- Control House
- A SCADA Control System

Consent of copyright owner required for any other use.
For inspection purposes only.

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
		X

G.4 Storm Water Overflows

Provide details on a programme of improvements to ensure that discharges other than the primary and secondary discharges comply with the definition of 'storm

SECTION H: DECLARATION

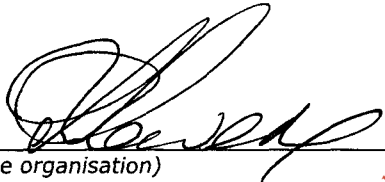
Declaration

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

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

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

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

Signed by : 
(on behalf of the organisation)

Date :

17th Dec 09

Print signature name:

P Power

Position in organisation: Director of Services

For inspection purposes only.
Consent of copyright owner required for any other use.

ATTACHMENTS TABLE OF CONTENTS		
ATTACHMENTS	ITEM	TITLE
A.1	Map 1	Location Plan of WWTP
A.1	Map 2	Location of WWTP
B.1	Map 3	Agglomeration Boundary
B.2	Map 4	Location of WWTP
B.2	Map 5	Location of Upstream and Downstream Monitoring Points
B.3	Map 6	Location of Primary Discharge Point
B.3	Map 7	Location of Upstream and Downstream Monitoring Points
B.9	Text	Design Report
E.2	Text	Laboratory Accreditation
E.2	Map 8	Location of Upstream and Downstream Monitoring Points
E.4	Table	Sampling data
F.1	Text	Great Island Site Synopsis
F.1	Text	Cork harbour Site Synopsis
F.1	Text	Draft Pollution Reduction Plan for North Channel
F.1	Text	Dungourney Waterbody Report
Online Data	Table	Online Data

For inspection purposes only.
Consent of copyright owner required for any other use.

Agglomeration details

Leading Local Authority	Cork County Council
Co-Applicants	
Agglomeration	Dungourney
Population Equivalent	160
Level of Treatment	Primary
Treatment plant address	Dungourney ,County Cork
Grid Ref (12 digits, 6E, 6N)	193322 / 097457
EPA Reference No:	

Contact details

Contact Name:	Patricia Power
Contact Address:	Water Services Section Cork County Council Southern Division Carrigrohane Road Cork
Contact Number:	021-4276891
Contact Fax:	021-4276321
Contact Email:	patricia.power@corkcoco.ie

For inspection purposes only
Consent of copyright owner required for any other use.

WWD Licence Application Annex I
THIS APPLICATION HAS NOT BEEN SUBMITTED

Table D.1(i)(a): EMISSIONS TO SURFACE/GROUND WATERS (Primary Discharge Point)

Discharge Point Code: SW-1

Local Authority Ref No:	SW1DUN	
Source of Emission:	PRIMARY DISCHARGE	
Location:	Dungourney	
Grid Ref (12 digits, 6E, 6N)	193299 / 097414	
Name of Receiving waters:	Dungourney River	
Water Body:	River Water Body	
River Basin District	South Western RBD	
Designation of Receiving Waters:	none	
Flow Rate in Receiving Waters:	0.02	m ³ .sec ⁻¹ Dry Weather Flow
	0.03	m ³ .sec ⁻¹ 95% Weather Flow
Additional Comments (e.g. commentary on zero flow or other information deemed of value)		

Emission Details:

(i) Volume emitted			
Normal/day	36 m ³	Maximum/day	108 m ³
Maximum rate/hour	4.5 m ³	Period of emission (avg)	60 min/hr 24 hr/day 365 day/yr
Dry Weather Flow	0.00042 m ³ /sec		

For inspection purposes only. Consent of copyright owner required for any other use.

WWD Licence Application Annex I
THIS APPLICATION HAS NOT BEEN SUBMITTED

Table D.1(i)(b): EMISSIONS TO SURFACE/GROUND WATERS - Characteristics of The Emission
 (Primary Discharge Point)

Discharge Point Code: SW-1

Substance	As discharged			
	Unit of Measurement	Sampling Method	Max Daily Avg.	kg/day
pH	pH	Grab	= 9	
Temperature	°C	Grab	= 25	
Electrical Conductivity (@ 25°C)	µS/cm	Grab	= 1000	
Suspended Solids	mg/l	Grab	= 350	37.8
Ammonia (as N)	mg/l	Grab	= 60	6
Biochemical Oxygen Demand	mg/l	Grab	= 300	32.4
Chemical Oxygen Demand	mg/l	Grab	= 800	86.4
Total Nitrogen (as N)	mg/l	Grab	= 85	9.18
Nitrite (as N)	mg/l	Grab	< 0.1	0.01
Nitrate (as N)	mg/l	Grab	< 0.5	0
Total Phosphorous (as P)	mg/l	Grab	= 12	1.296
OrthoPhosphate (as P)	mg/l	Grab	= 7	0.7
Sulphate (SO ₄)	mg/l	Grab	≤ 30	3
Phenols (Sum)	µg/l	Grab	< 0.1	0.01

For Orthophosphate: this monitoring should be undertaken on a sample filtered on 0.45µm filter paper
 For Phenols: USEPA Method 604, AWWA Standard Method 6240, or equivalent.

For inspection purposes only.
 Consent of copyright owner required for any other use.

WWD Licence Application Annex I
THIS APPLICATION HAS NOT BEEN SUBMITTED

Table D.1(i)(c): DANGEROUS SUBSTANCE EMISSIONS TO SURFACE/GROUND WATERS - Characteristics of The Emission (Primary Discharge Point)

Discharge Point Code: SW-1

Substance	As discharged			
	Unit of Measurement	Sampling Method	Max Daily Avg.	kg/day
Atrazine	µg/l	Grab	< 0.01	0.001
Dichloromethane	µg/l	Grab	< 1	0.1
Simazine	µg/l	Grab	< 0.01	0.0001
Toluene	µg/l	Grab	< 0.28	0.028
Tributyltin	µg/l	Grab	= 0	0
Xylenes	µg/l	Grab	< 0.73	0.073
Arsenic	µg/l	Grab	= 0.8	0.08
Chromium	µg/l	Grab	< 20	2
Copper	µg/l	Grab	< 20	2
Cyanide	µg/l	Grab	< 5	0.5
Flouride	µg/l	Grab	= 142	14.2
Lead	µg/l	Grab	< 20	2
Nickel	µg/l	Grab	< 20	2
Zinc	µg/l	Grab	< 20	2
Boron	µg/l	Grab	= 84	8.4
Cadmium	µg/l	Grab	< 20	2
Mercury	µg/l	Grab	= 0.14	0.014
Selenium	µg/l	Grab	< 2.12	0.212
Barium	µg/l	Grab	< 20	2

For Orthophosphate: this monitoring should be undertaken on a sample filtered on 0.45µm filter paper

For Phenols: USEPA Method 604, AWWA Standard Method 6240, or equivalent.

Consent of applicant owner required for any other use.
 For inspection purposes only.

WWD Licence Application Annex I
THIS APPLICATION HAS NOT BEEN SUBMITTED

TABLE E.1(i): WASTE WATER FREQUENCY AND QUANTITY OF DISCHARGE – Primary and Secondary Discharge Points

Identification Code for Discharge point	Frequency of discharge (days/annum)	Quantity of Waste Water Discharged (m ³ /annum)
SW-1	365	13140

For inspection purposes only.
Consent of copyright owner required for any other use.

THIS APPLICATION HAS NOT BEEN SUBMITTED

TABLE E.1(ii): WASTE WATER FREQUENCY AND QUANTITY OF DISCHARGE – Storm Water Overflows

Identification Code for Discharge point	Frequency of discharge (days/annum)	Quantity of Waste Water Discharged (m ³ /annum)	Complies with Definition of Storm Water Overflow
---	-------------------------------------	--	--

*For inspection purposes only.
Consent of copyright owner required for any other use.*

WWD Licence Application Annex I
THIS APPLICATION HAS NOT BEEN SUBMITTED

TABLE F.1(i)(a): SURFACE/GROUND WATER MONITORING

Primary Discharge Point

Discharge Point Code:	SW-1
MONITORING POINT CODE:	aSW-1d
Grid Ref (12 digits, 6E, 6N)	193299 / 079414

Parameter	Results (mg/l)			Sampling method	Limit of Quantitation	Analysis method / technique
	01/01/09	27/10/09				
pH		= 7.3		Grab	2	Electrochemical
Temperature	= 0			Grab	0.5	Electrochemical
Electrical Conductivity (@ 'C)		= 162		Grab	0.5	Electrochemical
Suspended Solids		= 4		Grab	0.5	Gravimetric
Ammonia (as N)		< 0.1		Grab	0.02	Colorimetric
Biochemical Oxygen Demand		= 1.1		Grab	0.06	Electrochemical
Chemical Oxygen Demand		< 21		Grab	8	Digestion & Colorimetric
Dissolved Oxygen	= 0			Grab	0.2	ISE
Hardness (as CaCO ₃)	= 0			Grab	1	Titrimetric
Total Nitrogen (as N)		= 4.23		Grab	0.5	Digestion & Colorimetric
Nitrite (as N)		< 0.1		Grab	0.1	Colorimetric
Nitrate (as N)		= 3.05		Grab	0.5	Colorimetric
Total Phosphorous (as P)		< 0.05		Grab	0.2	Digestion & Colorimetric
OrthoPhosphate (as P)		< 0.05		Grab	0.02	Colorimetric
Sulphate (SO ₄)		< 30		Grab	30	Turbidimetric
Phenols (Sum)	= 0			Grab	0.1	GC-MS2

For inspection purposes only. Consent of copyright owner required for any other use.

For Orthophosphate: this monitoring should be undertaken on a sample filtered on 0.45µm filter paper
 or Phenols: USEPA Method 604, AWWA Standard Method 6240, or equivalent.

Additional Comments:	Default of 01/01/09 and 0 where no results are available
----------------------	--

WWD Licence Application Annex I
THIS APPLICATION HAS NOT BEEN SUBMITTED

TABLE F.1(i)(b): SURFACE/GROUND WATER MONITORING (Dangerous Substances)

Primary Discharge Point

Discharge Point Code:	SW-1
MONITORING POINT CODE:	aSW-1d
Grid Ref (12 digits, 6E, 6N)	193299 / 079414

Parameter	Results (µg/l)			Sampling method	Limit of Quantitation	Analysis method / technique
	01/01/09	27/10/09				
Atrazine	= 0			Grab	0.96	HPLC
Dichloromethane	= 0			Grab	1	GC-MS1
Simazine	= 0			Grab	0.01	HPLC
Toluene	= 0			Grab	0.02	GC-MS1
butyltin	= 0			Grab	0.02	GC-MS1
Xylenes	= 0			Grab	1	GC-MS1
Arsenic	= 0			Grab	0.96	ICP-MS
Chromium		< 20		Grab	20	ICP-OES
Copper		< 20		Grab	20	ICP-OES
Cyanide	= 0			Grab	5	Colorimetric
Flouride		= 49		Grab	100	ISE
Lead		< 20		Grab	20	ICP-OES
Nickel		< 20		Grab	20	ICP-OES
Zinc		< 20		Grab	20	ICP-OES
Boron		< 20		Grab	20	ICP-OES
Cadmium		< 20		Grab	20	ICP-OES
Mercury	= 0			Grab	0.2	ICP-MS
Selenium	= 0			Grab	0.74	ICP-MS
Barium		< 20		Grab	20	ICP-OES

For inspection purposes only.
 Consent of copyright owner required for any other use.

Additional Comments:	TBT value is 0.02ug/l as Sn Default of 01/01/09 and 0 where no results are available, TBT testing not required
----------------------	---

WWD Licence Application Annex II
THIS APPLICATION HAS NOT BEEN SUBMITTED

Annex 2: Check List For Regulation 16 Compliance

Regulation 16 of the waste water discharge (Authorisation) Regulations 2007 (S.I. No. 684 of 2007) sets out the information which must, in all cases, accompany a discharge licence application. In order to ensure that the application fully complies with the legal requirements of regulation 16 of the 2007 Regulations, all applicants should complete the following.

In each case, refer to the attachment number(s), of your application which contains(s) the information requested in the appropriate sub-article.

Regulation 16(1) In the case of an application for a waste water discharge licence, the application shall -		Attachment Number	Checked by Applicant
(a)	give the name, address, telefax number (if any) and telephone number of the applicant (and, if different, of the operator of any treatment plant concerned) and the address to which correspondence relating to the application should be sent and, if the operator is a body corporate, the address of its registered office or principal office,		
(b)	give the name of the water services authority in whose functional area the relevant waste water discharge takes place or is to take place, if different from that of the applicant,		
(c)	give the location or postal address (including where appropriate, the name of the townland or townlands) and the National Grid reference of the location of the waste water treatment plant and/or the waste water discharge point or points to which the application relates,		
(d)	state the population equivalent of the agglomeration to which the application relates,		
(e)	specify the content and extent of the waste water discharge, the level of treatment provided, if any, and the flow and type of discharge,		
(f)	give details of the receiving water body, including its protected area status, if any, and details of any sensitive areas or protected areas or both in the vicinity of the discharge point or points likely to be affected by the discharge concerned, and for discharges to ground provide details of groundwater protection schemes in place for the receiving water body and all associated hydrogeological and geological assessments related to the receiving water environment in the vicinity of the discharge.		
(g)	identify monitoring and sampling points and indicate proposed arrangements for the monitoring of discharges and, if Regulation 17 does not apply, provide details of the likely environmental consequences of any such discharges,		
(h)	in the case of an existing waste water treatment plant, specify the sampling data pertaining to the discharge based on the samples taken in the 12 months preceding the making of the application,		
(i)	describe the existing or proposed measures, including emergency procedures, to prevent unintended waste water discharges and to minimise the impact on the environment of any such discharges,		
(j)	give particulars of the nearest downstream drinking water abstraction point or points to the discharge point or points,		
(k)	give details, and an assessment of the effects, of any existing or proposed emissions on the environment, including any environmental medium other than those into which the emissions are, or are to be made, and of proposed measures to prevent or eliminate or, where that is not practicable, to limit any pollution caused in such discharges,		
(l)	give detail of compliance with relevant monitoring requirements and treatment standards contained in any applicable Council Directives of Regulations,		
(m)	give details of any work necessary to meet relevant effluent discharge standards and a timeframe and schedule for such work.		
(n)	Any other information as may be stipulated by the Agency.		
Regulation 16(3) Without prejudice to Regulation 16 (1) and (2), an application for a licence shall be accompanied by -		Attachment Number	Checked by Applicant
(a)	a copy of the notice of intention to make an application given pursuant to Regulation 9,		
(b)	where appropriate, a copy of the notice given to a relevant water services authority under Regulation 13,		
(c)	Such other particulars, drawings, maps, reports and supporting documentation as are necessary to identify and describe, as appropriate -		
(c) (i)	the point or points, including storm water overflows, from which a discharge or discharges take place or are to take place, and		
(c) (ii)	the point or points at which monitoring and sampling are undertaken or are to be undertaken,		
(d)	such fee as is appropriate having regard to the provisions of Regulations 38 and 39.		

THIS APPLICATION HAS NOT BEEN SUBMITTED

Regulation 16(4) An original application shall be accompanied by 2 copies of it and of all accompanying documents and particulars as required under Regulation 16(3) in hardcopy or in an electronic or other format as specified by the Agency.		Attachment Number	Checked by Applicant
1	An Original Application shall be accompanied by 2 copies of it and of all accompanying documents and particulars as required under regulation 16(3) in hardcopy or in electronic or other format as specified by the agency.		
Regulation 16(5) For the purpose of paragraph (4), all or part of the 2 copies of the said application and associated documents and particulars may, with the agreement of the Agency, be submitted in an electronic or other format specified by the Agency.		Attachment Number	Checked by Applicant
1	Signed original.		
2	2 hardcopies of application provided or 2 CD versions of application (PDF files) provided.		
3	1 CD of geo-referenced digital files provided.		
Regulation 17 Where a treatment plant associated with the relevant waste water works is or has been subject to the European Communities (Environmental Impact Assessment) Regulations 1989 to 2001, in addition to compliance with the requirements of Regulation 16, an application in respect of the relevant discharge shall be accompanied by a copy of an environmental impact statement and approval in accordance with the Act of 2000 in respect of the said development and may be submitted in an electronic or other format specified by the Agency		Attachment Number	Checked by Applicant
3	2 CD versions of EIS, as PDF files, provided.		
1	EIA provided if applicable		
	2 hardcopies of EIS provided if applicable.		
Regulation 24 In the case of an application for a waste water discharge certificate of authorisation, the application shall –		Attachment Number	Checked by Applicant
(a)	give the name, address, telefax number (if any) and telephone number of the applicant and the address to which correspondence relating to the application should be sent and, if the operator of the waste water works is a body corporate, the address of its registered office or principal office		
(b)	give the name of the water services authority in whose functional area the relevant waste water discharge takes place or is to take place, if different from that of the applicant,		
(c)	give the location or postal address (including where appropriate, the name of the townland or townlands) and the National Grid reference of the location of the discharge point or points to which the application relates,		
(d)	state the population equivalent of the agglomeration to which the application relates,		
(e)	in the case of an application for the review of a certificate, specify the reference number given to the relevant certificate in the register,		
(f)	specify the content and extent of the waste water discharge, the level of treatment provided and the flow and type of discharge,		
(g)	give details of the receiving water body, its protected area status, if any, and details of any sensitive areas or protected areas, or both, in the vicinity of the discharge point or points or likely to be affected by the discharge concerned,		
(h)	identify monitoring and sampling points and indicate proposed arrangements for the monitoring of discharges and of the likely environmental consequences of any such discharges,		
(i)	in the case of an existing discharge, specify the sampling data pertaining to the discharge based on the samples taken in the 12 months preceding the making of the application,		
(j)	describe the existing or proposed measures, including emergency procedures, to prevent unauthorised or unexpected waste water discharges and to minimise the impact on the environment of any such discharges,		
(k)	give particulars of the location of the nearest downstream drinking water abstraction point or points to the discharge point or points associated with the waste water works,		
(l)	give details of any designation under any Council Directive or Regulations that apply in relation to the receiving waters,		
(m)	give details of compliance with any applicable monitoring requirements and treatment standards,		
(n)	give details of any work necessary to meet relevant effluent discharge standards and a timeframe and schedule for such work,		
(o)	give any other information as may be stipulated by the Agency, and		
(p)	be accompanied by such fee as is appropriate having regard to the provisions of Regulations 38 and 39.		