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

Environmental Protection Agency,
Office of Climate change and resource Unit,
Licencing Unit ,
P.O.Box 3000,
Johnstown Castle Estate,
County Wexford.

Our Ref.: MS/DLCloy/0209

24th February 2009

Sub.: Waste Water Discharge License Application for the Agglomeration of Spital,Cloyne ,County Cork.

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Dear Sir/Madam,

Please find enclosed the waste water discharge license application for the agglomeration of Spital, Cloyne in County Cork.

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

- 1 No. signed hard copies of originals.
- 1 No. hard copy of 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.

Also enclosed is a paying order for the application fee of €15,000.

Yours faithfully,

Patricia Power

Director of Services

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This is a draft document and is subject to revision.

Environmental Protection Agency
An Ghníomhaireacht um Chaomhnú Comhshaoil

Waste Water Discharge Licence Application Form

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EPA Ref. Nº: *(Office use only)*	

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

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Tracking Amendments to Draft Application Form

Version No.	Date	Amendment since previous version	Reason
V. 1.	11/10/07	N/A	
V. 2.	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'. Amend wording of Checklist in Annex to reflect wording of Regulation 16(5) of S.I. No. 684 of 2007. Inclusion of unique point code for each point of discharge and storm water overflow.	To accurately reflect the information required To accurately reflect the Regulations and to obtain the application documentation in appropriate format. To aid in cross-referencing of application documentation.
V.4	18/04/08	Inclusion of requirement to provide name of agglomeration to which the application relates. Amend wording of Section B.7. (iii) to reflect the title of Water Services Authority. Addition of new Section B.9 (ii) in order to obtain information on developments yet to contribute to the waste water works. Addition of sub-sections C.1.1 & C.1.2 in order to clarify information required for Storm water overflow and pumping stations within the works. Amend Section D.1 to include a requirement for monitoring data for influent	To accurately determine the agglomeration to be licensed. To accurately reflect the Water Services Act, 2007. To obtain accurate population equivalent figures for the agglomeration. To obtain accurate information on design and spill frequency from these structures. To acquire information on the population loading onto the plant and to provide information on performance rates within

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		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 include Shellfish Waters Directive.	To accurately reflect the Water Services Act, 2007 requirements.
V.6	26/08/2008	Amendments to Section D to reflect new web based reporting. Amended requirements for reporting on discharges under E.1 Waste Water Discharge Frequency and Quantities. Amendment to Section F.1 to specify the type of monitoring and reporting required for the background environment. Removal of Annexes to application form.	To clarify the reporting requirements. To streamline reporting requirements. To clarify the reporting requirements for ambient monitoring. To reflect the new web based reporting requirements.

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

CONTENTS

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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 (S.I. No. 684 of 2007) or for the review of an existing Waste Water Discharge licence.

The Application Form **must** 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 (S.I. No. 684 of 2007). 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. 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.

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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 (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.

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, a system of unique reference numbers should be used to denote each discharge point. These should be simple, logical, and traceable throughout the application.

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

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

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.

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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 (S.I. No. 684 of 2007).

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

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

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

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SECTION A: NON-TECHNICAL SUMMARY

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

A non-technical summary of the application is to be included here. The summary should identify all environmental impacts of significance associated with the discharge of waste water associated with the waste water works. This description should also indicate 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**

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Non-Technical Summary

Cloyne is located approximately 7km south of Midleton, on the R629 regional route which connects Midleton with Ballycotton. The village has experienced substantial population growth over the last number of years.

The Waste Water Works and the activities carried out therein

The waste water in Cloyne is collected in a partially combined foul and separate foul sewerage drainage network.
There are five wastewater pumping stations in Cloyne; River Street, Cois na Cruma, Dun Ogra, Tur Cluine and Cloyne Meadows pumping station. River Street pumping station is the only pumping station in Cloyne that has been taken in charge by Cork County Council.
Tur Cluine, Cloyne Meadows and Dun Ogra pumping stations pump waste water to a foul sewer at the junction of Rock Street and Chapel Street. The waste water then gravitates to the WWTP.
Cois na Cruma pumping station pumps waste water to River Street pumping station. River Street pumping station pumps waste water to the previously mentioned foul sewer at the junction of Rock Street and Chapel Street. Again, the waste water then gravitates to the WWTP.
None of the pumping stations have emergency overflows. Cois na Cruma pumping station in Demesne, North East Cloyne was built as part of a housing development. This pumping station has a holding tank with a capacity of 64m^3. The holding tank was conditioned at planning stage in order to allow for future

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development. A map showing the location of the pumping stations is included in **Attachment G.3**.

Cloyne WWTP is currently designed for a Population Equivalent (PE) of 1400. Cloyne waste water treatment facility contains two elements, a waste water treatment plant and a sludge holding tank with picket fence thickener. Influent initially gravitates to the inlet sump where the waste water is passed through a 6mm screen. The influent enters the aeration tank through a flowmeter from the inlet sump. The influent is treated biologically by the activated sludge. Returned sludge from the clarifier also enters the aeration tank. The dissolved oxygen is provided by a surface aerator. The clarifier receives sludge by gravity from the aeration tank. Sludge enters the picket fence thickener from the clarifier. Sludge is removed from the picket fence thickener and taken off site for disposal in accordance with the Cork sludge management plan. Supernatant from the clarifier is directed to the reed beds via the splitter chamber where it receives tertiary treatment prior to discharge to the adjacent stream. A storm water overflow joins the final effluent line after the monitoring point and discharges at the outfall. Storm water from the village joins the final effluent line at the outfall point.

Currently, influent flows entering the inlet works of the plant range from 179m^3/d to 300m^3/d with an average inflow of 229m^3/d entering the plant per day. Based on an average hydraulic load of 225l/h/d the Population Equivalent equates of 1,018.

White Young Green Ireland Ltd. has been appointed by Cork County Council as Consulting Engineers for the design, procurement and construction stages of Upgrading of Wastewater Treatment Facilities at Cloyne. There are proposals to upgrade plant from 1400 PE to 3000 PE and pump effluent to proposed sea outfall at Ballycotton for discharge. A copy of this report is included in **Attachment A1.2**. The proposed improvements include:

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- Upgrading / duplicating the inlet works (screens and pumps)
- An 11m diameter aeration tank
- A 9m diameter clarifier
- A second 60m^3 Sludge Thickening / Holding Tank
- An effluent pumping station

Cloyne WWTP is currently operated by a private operator under a 10 year Operation and Maintenance Contract. The Service Provider is fully responsible for the provision of all plant, materials including consumables and labour including licences and permits necessary to ensure that the facility is operated and maintained in accordance with the best practice and any performance requirements stipulated in the Employer's Requirements.

The sources of emissions from the waste water works

The population load for the Cloyne agglomeration arises from the following area:

- Domestic population
- Commercial premises
- School
- Tourism

The sewage from all commercial premises is collected via the public sewer and treated in conjunction with the domestic waste at the WWTP. Cloyne WWTP does

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not currently receive any other municipal waste water sludge's imported from other municipal waste water sources or septic tanks.

Other potential emissions from the waste water treatment plant include:

- Odour generated from the treatment process – there have been no recorded issues to date.
- Noise pollution – minor during normal operation. There have been no complaints regarding noise at the plant.

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 emissions on the environment.

The final effluent discharges to a stream running parallel to the northern boundary of the site. The maximum flow to the existing plant is in the order of 179m^3/d to 300m^3/d with an average inflow of 229m^3/d entering the plant per day. The new plant will be designed for 3,000 PE and shall be designed to cater for 3DWF. The proposed upgrade of Cloyne WWTP will increase the capacity of the plant from 1,400 PE to 3,000 PE and pump effluent to proposed sea outfall at Ballycotton for discharge.

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

Technology
The new WWTP will include the following elements:

- Inlet Screening
- 2 No. aeration tanks
- 2 No. clarifiers
- 2 No. Picket Fence Thickeners

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

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

Cloyne Waste Water Treatment Plant is due to be upgraded to cater for 3,000 PE under the Serviced Land Initiative Funding Programme. There is sufficient space on the existing site to cater for the proposed upgrade. The design includes a waste water treatment plant, sludge thickening facilities as well as tertiary treatment.

The treated effluent will no longer discharge into the adjacent stream but will be pumped for discharge to the sea at a proposed outfall at Ballycotton.

Measures planned to monitor emissions into the environment

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The Cork County Council Environmental Laboratory carries out sampling of the influent and effluent. The Cork County Council Environmental Department located at Inniscarra takes samples from the stream upstream and downstream of the existing wastewater treatment plant outfall.
A foreshore licence will be required in order to discharge into the sea at Ballycotton. The Environmental Laboratory will continue to monitor the influent and effluent at Cloyne WWTP and will also monitor compliance with the Foreshore Licence.

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SECTION B: GENERAL

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

B.1 Agglomeration Details

Name of Agglomeration:	Cloyne

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 relates. It should have the boundary of the agglomeration to which the licence application relates clearly marked in red ink.

Name*:	Cork County Council Southern Division
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.

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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 (authorisation) licence application.

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Design, Build & Operate Contractor Details

Name*:	EPS
Address:	Quartertown Industrial Estate
	Mallow
	Co. Cork
Tel:	022 31200
Fax:	022 31250
e-mail:	info@epsireland.com

*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
	✓	

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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*:	Madeleine Healy
Address:	Spital
	Cloyne
	Co. Cork
Grid ref (6E, 6N)	191154E 067799N
Level of Treatment	Tertiary
Primary Telephone:	021 4285233
Fax:	021 4276321
e-mail:	Madeleine.Healy@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 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
	✓	

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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 Discharge	Pipe to river
Unique Point Code	SWO1CLYN
Location	Spital Stream
Grid ref (6E, 6N)	191059E 067821N

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

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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 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 (≤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**
		✓

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

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

Type of Discharge	Pipe to river
Unique Point Code	SWO2CLYNE
Location	Spital Stream
Grid ref (6E, 6N)	191059E 067821N

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

Attachment included	**Yes**	**No**
	✓	

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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:	County Hall
	Carrigrohane Road
	Cork
Tel:	021 4276891
Fax:	021 4276321
e-mail:	planninginfo@corkcoco.ie

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

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

Local Authority Planning File Reference Nº:	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.

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Where planning permission is not required for the development, provide reasons, relevant correspondence, *etc.*

Attachment included	**Yes**	**No**
		✓

B.7 Other Authorities

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

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

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

Within the SFADCo Area	**Yes**	**No**
		✓

B.7 (ii) Health Services Executive Region

The applicant should indicate the **Health Services Executive Region** where the discharge or discharges are or will be located.

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Name:	Health Services Executive Southern Region
Address:	North Lee Local Health Office
	Floor 2, Abbeycourt House
	George's Quay
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 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:	Not applicable
Address:	Not applicable
Tel:	Not applicable
Fax:	Not applicable
e-mail:	Not applicable

Relevant Authority Notified	**Yes**	**No**
		✓

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

Attachment included	Yes	No
		✓

B.8 Notices and Advertisements

Regulations 10 and 11 of the Waste Water Discharge (Authorisation) Regulations, 2007 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.*

Attachment B.8 should contain a copy of the site notice and an appropriately scaled drawing (≤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
	✓	

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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 Equivalent	**1800**
Data Compiled (Year)	**2009**
Method	**CSO Data, GeoDirectory assessment**

B.9 (ii) Pending Development

Where planning permission has been granted for development(s), but development has not commenced or been 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.

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The Cork County Council Planning Application Database identified a number of major developments, including one to contribute 103 units of residence. There were also a number of smaller developments. The total number of residential units to be granted planning permission was 336. The 336 additional residential locations, with an average of 2.9 persons per household, equates to a population of 974.
Assuming the non-domestic contribution to be 15% of domestic, the non-domestic equates to 146 PE.
The waste water works will not be able to treat this additional load of 1120 PE under its current operation without posing an environmental risk. However, with the scheduled upgrade works, the treatment plant will be able to cater for this additional load and future loads.

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, S.I. No. 684 of 2007.

Class of waste water discharge	**Fee (in €)**
1000-2000 PE	€15,000

Appropriate Fee Included	**Yes**	**No**
	✓	

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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 and 2003, as amended by Section 13 of Protection of the Environment Act, 2003.

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

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Attachment included	Yes	No
		✓

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.

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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.

Operational Information Requirements

Cloyne is located approximately 7km south of Midleton, on the R629 regional route which connects Midleton with Ballycotton. There are five pumping stations in Cloyne village. Waste water from the pumping station pumps waste water to the foul sewer at the junction of Rock Street and Chapel Street, it then gravitates to the Waste Water Treatment Plant (WWTP). Cloyne WWTP was designed for a Population Equivalent (PE) of 1400.

Inlet Screening Chamber

Under normal operating conditions all of the influent will be directed through the mechanical screen. Screenings of 6mm or larger is retained on the mechanical screen. These screenings are partially dewatered and deposited to a wheelie bin before removal to a landfill.

Inlet Sump

The influent flows by gravity to the inlet sump after the screening process. There are 2 No. submersible pumps operating on a duty/standby basis. The level in the sump is controlled by two floats. There are also 2 No. storm pumps installed operating on a duty/standby basis. The storm pumps pump the excess flow to join up with the final effluent line after the effluent sampling point.

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Aeration Tank

Under normal operating conditions all the influent is pumped to the aeration tank via the forward feed pumps in the inlet sump. The aeration tank has a capacity of 260m^3. The influent is treated biologically by the activated sludge. The dissolved oxygen is provided by a surface aerator. A portion of the sludge is also returned to the aeration tank from the clarifier via a RAS pump. Sludge exits the aeration tank through a bellmouth.

Clarifier

The sludge is gravity fed from the aeration tank to the clarifier. Flow from the aeration tank to the clarifier is directed to the central stilling box. As settlement occurs the supernatant rises and overflows the peripheral v-notch weir. The supernatant then gravitates down to the splitter chamber and is directed to the reed beds. The heavier activated sludge settles to the floor of the tank. A series of floor scrapers are fitted in the aeration tank which continuously clean the floor and direct the sludge to a draw off pipe which is located at the base of the aeration tank. The sludge is directed to the RAS pump and returned to the aeration tank. Excess sludge is directed to a picket fence thickener.

Picket Fence Thickener

The excess sludge enters the thickener through a tee in the sludge return line which runs from the clarifier to the aeration tank. The sludge entering the Picket Fence Thickener (PFT) is controlled manually by a valve. A decant line runs from the PFT to the inlet sump.

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Reed Beds

The treated effluent flows, by gravity, from the clarifier to the splitter chamber. The splitter chamber divides the effluent between two reed beds where it receives further filtration. From the reed bed, the flow splits into two lines located along the side of each bed. The treated effluent exits each reed bed through a valve. The effluent from the two valves joins a common line. Flows from the storm water overflow also join up with this line and then proceeds through a sampling and monitoring point before discharge to the river.

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.

Storm Water Overflows

Excess flows entering the plant bypass the treatment works and joins up with the final effluent before discharge to the adjacent stream. The storm water overflow passes through a 6mm screen prior to discharge. There is no information regarding the frequency of storm water overflows, or the quantities discharged.

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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.

Pumping Stations

River Street Pumping Station
In the River Street Pumping Station there are two pumps which operate on a duty/standby basis. The pumps activate when waste water can be pumped forward at a rate of $5m^3/h$ and can cater for up to $120m^3/h$. There are no emergency overflows provided at the pumping station. There is no information regarding the frequency or duration of activation of emergency discharges to date.

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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**
	✓	

C.2 Outfall Design and Construction

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

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

Primary Discharge Point
There is one discharge point from the waste water treatment plant. The outlet from the plant conveys treated effluent from the treatment plant to the discharge point at the stream. **Attachment B3_Map6** identifies the location of the outfall.

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There is no information regarding the invert of the discharge pipe, nor any technical construction details regarding the outfall.

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

Attachment included	**Yes**	**No**
		✓

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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 emissions 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 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 Programme of Measures) the applicant shall screen the discharge for the relevant substance.

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D.1 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 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 D.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 – Provided in E4	**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
SWO1C LYN	Primary Discharge	Cork County Council	Stream	Unknown	None	E 191060	N 067821
SWO2C LYN	Storm Water Overflow	Cork County Council	Stream	Unknown	None	E 191060	N 067821

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.

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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 emission and its effect on the receiving environment should be considered.

E.2 Monitoring in respect of Cloyne Waste Water Licence Application

The plant is currently monitored by the Environmental Directorate of Cork County Council to measure compliance with the requirements of the Urban Wastewater Directive. Samples are also collected upstream and downstream of the discharge location at this time. The stream, which is the receiving water body, is monitored in terms of the Freshwater Fish Directive, the Phosphorus Regulations by the Water laboratory of Cork County Council and in recent times the Water Framework Directive as part of the River Basin Project. It is proposed to continue this multi-faceted approach to monitoring the treatment plant and the impacts of the discharge to the receiving waters.

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. Details of the Accreditation can be found in Attachment E.2. The Wastewater Laboratory of Cork County Council is currently accredited for the following parameters under the ISO 17025 system:

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- pH
- Biochemical Oxygen Demand
- Chemical Oxygen Demand
- Suspended Solids
- Ammonia
- Ortho Phosphates
- Total Phosphates
- Chloride
- Sulphate

The laboratory perform a number of analytical tests e.g. fats, oil, grease and metals using an ICP-OES system and while the Wastewater Laboratory of Cork County Council is not currently accredited for extra tests, the same analytical procedures and protocol are adhered to by the laboratory as would be required if the tests were accredited. The laboratory also participates in proficiency testing schemes which measure the accuracy of the results and performance of the laboratory in both the EPA scheme and the WRC Aquacheck scheme from the UK. The performance of the laboratory in these schemes is excellent and the non-accredited tests are within the performance criteria for the schemes as evaluated by the scheme coordinators.

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

Attachment included	**Yes**	**No**
	✓	

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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
SW01CLYN	Primary Discharge	S	E 191124	N 067811	N
aSWO1u	Primary Discharge	S	E 191631	N 068006	N
aSW01d	Primary Discharge	S	E 122684	N 075589	N

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 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)(l) 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

- 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.

- 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.

- 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.

- 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, meteorological data, water quality, geology, hydrology, and hydrogeology. The latter must in particular present the aquifer classification and vulnerability. The Geological Survey of Ireland Groundwater Protection Scheme Dept 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.

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- 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.

- 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.

- Indicate whether or not emissions from the agglomeration or any plant, methods, processes, operating procedures or other factors which affect such emissions are likely to have a significant effect on –

  (a) a site (until the adoption, in respect of the site, of a decision by the European Commission under Article 21 of Council Directive 92/43/EEC for the purposes of the third paragraph of Article 4(2) of that Directive) —

  (i) notified for the purposes of Regulation 4 of the Natural Habitats Regulations, subject to any amendments made to it by virtue of Regulation 5 of those Regulations,

  (ii) details of which have been transmitted to the Commission in accordance with Regulation 5(4) of the Natural Habitats Regulations, or

  (iii) added by virtue of Regulation 6 of the Natural Habitats Regulations to the list transmitted to the Commission in accordance with Regulation 5(4) of those Regulations,

  (b) a site adopted by the European Commission as a site of Community importance for the purposes of Article 4(2) of Council Directive 92/43/EEC[1] in accordance with the procedures laid down in Article 21 of that Directive,

  (c) a special area of conservation within the meaning of the Natural Habitats Regulations, or

  (d) an area classified pursuant to Article 4(1) or 4(2) of Council Directive 79/409/EEC[2];

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

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

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

F.1 Assessment of Impact on Receiving Surface Water

Cloyne Waste Water Treatment Plant discharges to a stream which runs parallel to the northern boundary of the site. The stream is small (c. 2km^2), indicating a DWF of less than 2 l/s and a 95%ile flow of less than 4 l/s. This compares to a current average daily discharge to the stream of approximately 308 m^3/day or 3.6 l/s. Thus, at present, dilution at the 95%ile flow is over 1:1. The desirable dilution factor of 1:8 is not being achieved the stream does not have the assimilative capacity to take effluent. A new discharge plant is therefore required.

The stream flows for approximately 3km before discharging to Cork Harbour at Saleen. The stream has an area less than 10km^2, therefore under the Water Framework Directive it is taken that Cloyne Waste Water Treatment Plant discharges directly to Cork Harbour.

Groundwater Direcrives 80/68/EEC & 2006/11/EC,

Cloyne Waste Water Treatment Plant discharges to surface water and does not discharge to any other media.

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Drinking Water Directives 80/778/EEC

There are no water abstraction points down stream of the discharge point from the WWTP at Cloyne.

Birds Directive 79/4109/EEC,

Cork Harbour is a Special Protection Area, the discharge from Cloyne Waste Water Treatment Plant complies with the standards for the Urban Waste Water Directive and therefore should be compliant with the Birds Directive.

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

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

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

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

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Sampling carried out by the Wastewater Laboratory of Cork County Council showed that Cloyne Waste Water Treatment Plant was in compliance with the limits set down by the UWWD for BOD, COD and Suspended Solids in 2008.

Bathing Water Directive 76/160/EEC

Council Directive 76/160/EEC 1975 concerning bathing water quality and the associated Bathing Water Regulations (SI No 177 of 1998) lay down quality requirements for inland and coastal waters designated bathing areas. Cork Harbour at Saleen is not a designated bathing water area. The nearest bathing water area is at Fountainstown approximately 13km downstream of the final effluent outfall.

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

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

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Cork Harbour near Rostellan and Aghada is designated as Shellfish waters. The Department of the Marine and Natural Resources Live Bivalve Mollusce (Protection Areas) Designation 2006 has confirmed that Cork Harbour is a licensed area for the cultivation of shellfish such as oysters.

In accordance with the Live Bivalve Molluscs (Production Areas) Designation 2006 and Council Directive 91/492/EEC, Cork Harbour has a Category B status which means that shellfish from this area have to be treated in a purification centre or a relay bed before they can be placed on the market for human consumption. The water quality standards for Shellfish in Category B Waters is summarised in **Table F.1.** The status of the shellfish waters is monitored on a monthly basis by the National Marine Institute.

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Category of Waters	Faecal Coliforms / 100g of flesh	Compliance of Samples	Further Treatment
A- Immediate Human Consumption	<300	100% <300	Not Required
B- Human Consumption After Treatment	**300 - 6,000**	**90% <6,000**	**Purification after Relaying**
C- Human Consumption After Treatment	6000 - 60,000	100% <6,000	Relaying for long period - Intensive Purification

Table F.1

- 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.**

Attachment included	Yes	No
		✓

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

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

ABS_CD	AGG_SERVED	ABS_VOL	PT_CD	DIS_DS	EASTING	NORTHING	VERIFIED
Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

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.

There are no drinking water abstraction points downstream of Cloyne Waste Water Treatment Plant.

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).

Details of compliance are outlined in Section F1.

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Compliance with Council Directives
Details of compliance are outlined in Section F1. Cloyne Waste Water Treatment Plant discharges to a stream which runs parallel to the northern boundary of the site. The stream is small and does not have the assimilative capacity to take effluent. The stream flows for approximately 3 km before discharging to Cork Harbour at Saleen. White Young Green Ireland Ltd. has been appointed by Cork County Council as Consulting Engineers for the design, procurement and construction stages of Upgrading of Wastewater Treatment Facilities at Cloyne.

In Cloyne, it is proposed to increase the capacity of the waste water treatment plant from 1400 PE to 3000 PE and pump the treated effluent to a proposed sea outfall at Ballycotton for discharge.

Funding has not yet been secured for this upgrade under the Water Services Investment Programme 2007-2009. Cork County Council WSIP section have applied to the DEHLG for funding under the Serviced Land Initiative.

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**
		✓

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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.

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

There are no EPA monitoring sites on the stream into which Cloyne WWTP discharges into, therefore the Q value upstream and downstream of the WWTP outfall is unknown.

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
		✓

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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.

Impact Mitigation

There are proposals to upgrade plant from 1400 PE to 3000 PE and pump effluent to proposed sea outfall at Ballycotton for discharge. The proposed improvements include:

- Upgrading / duplicating the inlet works (screens and pumps)
- An 11m diameter aeration tank
- A 9m diameter clarifier
- A second 60m^3 Sludge Thickening / Holding Tank
- An effluent pumping station

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
		✓

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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.

Storm Water Overflow

There are no overflows other than the primary overflow in the existing WWTP.

Attachment G.4 should contain the most recent programme of improvements, including a copy of any approved funding for the project and a timeframe for the completion of the necessary works to take place.

Attachment included	**Yes**	**No**
		✓

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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 (S.I. No. 684 of 2007).

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

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

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

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Consent of copyright owner required for any other use.

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

Print signature name: _____

Position in organisation:_____

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SECTION I: JOINT DECLARATION

Joint Declaration [Note1]

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

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

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

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

Lead Authority

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

Print signature name: _____

Position in organisation:_____

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Co-Applicants

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

Print signature name: _____

Position in organisation:_____

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

Print signature name: _____

Position in organisation:_____

Note 1: In the case of an application being lodged on behalf of more than a single water services authority the following declaration must be signed by all applicants.

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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 (S.I. No. 684 of 2007).

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

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

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Signed by : Patricia Power **Date :** 23rd Feb 09
(on behalf of the organisation)

Print signature name: Patricia Power

Position in organisation: Director of Services

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ATTACHMENTS TABLE OF CONTENTS		
ATTACHMENTS	ITEM	TITLE
A.1	Map 1	Site Location 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	Monitoring Points
B.3	Map 6	Primary Discharge Location
B.3	Map 7	Monitoring Points
B.5	Map 8	Storm Water Overflow Discharge Location
B.5	Map 9	Monitoring Points
B.8	Text	Newspaper Site Notice & Site Notice
B.8	Map 10	Site Notice Location
B.8	Text	Site Notice
C.1	DWG 1	Operation Information
C.1	DWG 2	Pump Station Outfall
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E.3	Table	Monitoring Data
E.4	Table	Monitoring Results
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Online Data	Table	Online Data

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