

This is a draft document and is subject to revision.



# Waste Water Discharge Licence Application Form

**EPA Ref. N<sup>o</sup>:**  
(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](http://www.epa.ie) Email: info@epa.ie

**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

		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	26/08/2007	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.

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

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

**CONTENTS**

	<b>Page</b>
<b>TRACKING AMENDMENTS TO DRAFT APPLICATION FORM</b>	<b>2</b>
<b>ABOUT THIS APPLICATION FORM</b>	<b>5</b>
<b>PROCEDURES</b>	<b>6</b>
<b>SECTION A: NON-TECHNICAL SUMMARY</b>	<b>8</b>
<b>SECTION B: GENERAL</b>	<b>12</b>
<b>SECTION C: INFRASTRUCTURE &amp; OPERATION</b>	<b>20</b>
<b>SECTION D: DISCHARGES TO THE AQUATIC ENVIRONMENT</b>	<b>27</b>
<b>SECTION E: MONITORING</b>	<b>29</b>
<b>SECTION F: EXISTING ENVIRONMENT &amp; IMPACT OF THE DISCHARGE(S)</b>	<b>31</b>
<b>SECTION G: PROGRAMMES OF IMPROVEMENTS</b>	<b>41</b>
<b>SECTION H: DECLARATION</b>	<b>48</b>
<b>SECTION I: JOINT DECLARATION</b>	<b>49</b>
<b>ANNEX 1: TABLES/ATTACHMENTS</b>	
<b>ANNEX 2: CHECKLIST</b>	

## 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](http://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.

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 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 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.

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

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

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

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

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

**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.**

*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 the hours during which the waste water works is supervised or manned and days per week of this supervision.

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

A description of:

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

Supporting information should form **Attachment N° A.1**

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



**SECTION A: NON-TECHNICAL SUMMARY**

Millstreet is a key settlement for the rural hinterland of North Cork and is located approximately 50 km from Cork City and 20km north of Macroom. The town is strategically located at the intersection of two regional roadways and also has rail access to the Mallow – Tralee Rail Line. In recent years there has been a marked increase in residential development in the town

**The Waste Water Works and the Activities Carried Out Therein**

The wastewater in Millstreet is collected in a partially combined foul and separate foul sewerage drainage network. The wastewater from the town gravitates to the wastewater treatment plant located approximately 0.7km north of the town centre. There are four number pumping stations within the agglomeration of Millstreet

Millstreet WWTP is designed for a Population Equivalent (PE) of 1,600, which was commissioned in early 1970’s. Extended Aeration is the process employed at the Millstreet waste water treatment plant. Influent initially gravitates into a via a 450mm diameter sewer to the inlet chamber/ storm overflow chamber, from this chamber influent gravitates to the oxidation ditch. Mixed liquor overflows the oxidation ditch via an adjustable weir to 2 Nr hopper shaped settlement tanks. Treated effluent from the settlement tanks is discharged to the adjacent Tanyard Stream.

In the event of high storm flows, two separate storm overflow chambers allow excess flows to bypass the treatment plant to the adjacent stream.

Currently the WWTP is receiving an average DWF of 1,100m<sup>3</sup>/d entering the plant and a BOD loading of 135Kg/day. The population equivalent of the WWTP is 2,252.

Millstreet WWTP is operated by Cork County Council. The plant is operated by a caretaker who duties also involves the maintenance of a number of other small WWTP’s in the area. The caretaker is on duty from 8.00am to 5.30pm Monday – Saturday.

**The sources of emissions from the waste water works**

The pollution load for the Millstreet agglomeration arises from the following areas:

- Domestic population
- Industrial
- Commercial premises
- Institutional - School & crèches
- Infiltration

The sewerage from all industrial & commercial premises is collected via the public sewer and treated in conjunction with the domestic waste at the WWTP.

Contributing Sector	Flow (m <sup>3</sup> /d)	BOD (kg/day)
Domestic	223.40	94.86
Commerical	255.14	14.70
Industrial	27.60	13.80

Institutional	23.56	11.78
Infiltration	580.00	0
<b>Total</b>	<b>1,109.70</b>	<b>135.14</b>
<b>Population Equivalent</b>		<b>2,252</b>

Summary of Existing Flows & Loads to Millstreet WWTP

**The nature and quantities of foreseeable emissions from the waste water works into the receiving aqueous environment as well as identification of significant effects of the emissions on the environment**

The final effluent is discharged to the Tnyard Stream, which is adjacent to the wastewater treatment plant site. This stream is a tributary of the Finnow River, which in turn is a tributary of the River Blackwater, The maximum flow to the existing WWTP is in the order of 1,109.70m<sup>3</sup>/d.

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

**Technology**

The current WWTP is being maintained and operated to a sufficient standard to ensure general compliance with the Urban Waste Water Treatment Regulations.

The treatment works consists of the following elements:

- Inlet Chamber / Storm overflow Chamber
- Oxidation Ditch
- Settling Tank
- Sludge Drying Beds
- Outfall to Tanyard Stream

**Techniques**

The proposed new WWTP shall be operated and managed in accordance with the Performance Management System, developed by the Water Service National Training Group (WSMTG).

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

Consultants have been engaged by Cork County Council to prepare a preliminary Report for the upgrade of the WWTP at Millstreet. It is envisaged that the new WWTP will be operational for late 2011. The PE of the upgraded WWTP will be in the order of 4,100.

**Measures planned to monitor emissions into the environment**

The Cork County Council Environmental Laboratory carries out sampling of the influent and effluent biannually. Sampling, Monitoring and analysis of the wastewater sludge is also undertaken by the Environmental Laboratory.

The Cork County Council Environmental Department located in Inniscarra takes samples from the River Bride upstream and downstream of the wastewater treatment plant approximately 6 times per year. Samples of the influent and effluent are also taken at these times.

The new wastewater treatment plant shall be equipped with automatic samplers on the inlet, overflow and outlet lines.

The EU Water Framework Directive Monitoring Programme is to be fully operational by the year 2012. This monitoring programme was prepared by the EPA to meet the requirements of the EU Water Framework Directive (2000/60/EC) and National Regulations implementing the Water Framework Directive (S.I. No. 722 of 2003) and National Regulations implementing the Nitrates Directive (S.I. No. 788 of 2005).

List of Attachments include the following:

- |                               |                     |
|-------------------------------|---------------------|
| • Location Map Scale 1:50,000 | Attachment A1 Map 1 |
| • Site Location Map of WWTP   | Attachment A1 Map 2 |
| • Site Layout                 | Attachment A1 Map 3 |

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

**SECTION B: GENERAL**

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

**B.1 Agglomeration Details**

<b>Name of Agglomeration:</b> Millstreet & Environs
---

**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.

<b>Name*:</b>	Cork County Council
<b>Address:</b>	Northern Division
	Annabella
	Mallow
	Co. Cork
<b>Tel:</b>	022 21123
<b>Fax:</b>	022 21983
<b>e-mail:</b>	<a href="mailto:Frank.cronin@corkcoco.ie">Frank.cronin@corkcoco.ie</a>

\*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.

<b>Name*:</b>	Frank Cronin
<b>Address:</b>	Northern Division
	Annabella
	Mallow
	Co. Cork
<b>Tel:</b>	022 21123
<b>Fax:</b>	022 21983
<b>e-mail:</b>	<a href="mailto:Frank.cronin@corkcoco.ie">Frank.cronin@corkcoco.ie</a>

\*This should be the name of person nominated by the water services authority for the purposes of the application.

**Co-Applicant's Details**

<b>Name*:</b>	Not Applicable
<b>Address:</b>	Not Applicable
<b>Tel:</b>	Not Applicable
<b>Fax:</b>	Not Applicable
<b>e-mail:</b>	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.

**Design, Build & Operate Contractor Details**

<b>Name*:</b>	Not Applicable
<b>Address:</b>	Not Applicable
<b>Tel:</b>	Not Applicable
<b>Fax:</b>	Not Applicable
<b>e-mail:</b>	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
	√	

**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.

<b>Name*:</b>	Martin Corcoran
<b>Address:</b>	Millstreet WWTP
	Drominahilla
	Millstreet
	Co. Cork
<b>Grid ref (6E, 6N)</b>	127399E, 090983N
<b>Level of Treatment</b>	Secondary
<b>Primary Telephone:</b>	029-70026
<b>Fax:</b>	029-70263
<b>e-mail:</b>	<a href="mailto:Martin.corcoran@corkcoc.ie">Martin.corcoran@corkcoc.ie</a>

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

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

Attachment included	Yes	No
	√	

**B.3 Location of Primary Discharge Point**

Give the location of the primary discharge point, as defined in the Waste Water Discharge (Authorisation) Regulation, associated with the waste water works.

<b>Type of Discharge</b>	450mm diameter outfall pipe from wastewater treatment plant. Open pipe
<b>Unique Point Code</b>	SW - 01 MILL
<b>Location</b>	WWTP site Drominahilla, Millstreet, Co. Cork
<b>Grid ref (6E, 6N)</b>	127398E, 091013N

**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.

<b>Attachment included</b>	<b>Yes</b>	<b>No</b>
	√	

**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.

<b>Type of Discharge</b>	Not Applicable
<b>Unique Point Code</b>	Not Applicable
<b>Location</b>	Not Applicable
<b>Grid ref (6E, 6N)</b>	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.

<b>Attachment included</b>	<b>Yes</b>	<b>No</b>
		√

**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.

<b>Type of Discharge</b>	300mm diameter concrete overflow pipe from manhole at entry to WWTP site
<b>Unique Point Code</b>	SW – 02 Mill
<b>Location</b>	At entrance gate to WWTP along Station Road
<b>Grid ref (6E, 6N)</b>	127282E 090864N

<b>Type of Discharge</b>	225mm diameter PVC overflow pipe from manhole at entry to WWTP site
<b>Unique Point Code</b>	SW – 03 Mill
<b>Location</b>	At entrance gate to WWTP along Station Road
<b>Grid ref (6E, 6N)</b>	127282E 090864N

<b>Type of Discharge</b>	225mm diameter overflow pipe from manhole prior to entry to sump
<b>Unique Point Code</b>	SW – 04 Mill
<b>Location</b>	Killarney Road Pumping Station at Inchileigh Bridge
<b>Grid ref (6E, 6N)</b>	126345E 090483N

<b>Type of Discharge</b>	100mm diameter overflow pipe from sump
<b>Unique Point Code</b>	SW – 05 Mill
<b>Location</b>	Mount Leader Pumping Station adjacent to Mount Leader Bridge
<b>Grid ref (6E, 6N)</b>	126808E 089966N

<b>Type of Discharge</b>	300mm diameter emergency pipe from 2 nr manhole's
<b>Unique Point Code</b>	SW – 06 Mill
<b>Location</b>	Station Road. 95m & 60m away from junction of Coologane St & Station Road
<b>Grid ref (6E, 6N)</b>	127330E, 090754N

**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
	√	

**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.

<b>Name:</b>	Cork County Council
<b>Address:</b>	Planning Department
	County Hall
	Carriagrohane Road
	Cork
<b>Tel:</b>	021 4276891
<b>Fax:</b>	021 4867007
<b>e-mail:</b>	<a href="mailto:Planninginfo@corkcoc.ie">Planninginfo@corkcoc.ie</a>

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

<b>has been obtained</b>	<input type="checkbox"/>	<b>is being processed</b>	<input type="checkbox"/>
<b>is not yet applied for</b>	<input checked="" type="checkbox"/>	<b>is not required</b>	<input type="checkbox"/>

<b>Local Authority Planning File Reference N<sup>o</sup>:</b>	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
		√

**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.

<b>Name:</b>	Health Service Executive
<b>Address:</b>	North Cork Area Headquarters
	Gouldhill
	Mallow, Co. Cork
<b>Tel:</b>	022 30200
<b>Fax:</b>	022 30211
<b>e-mail:</b>	Gerry.oconnell.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.

<b>Name:</b>	Not Applicable
<b>Address:</b>	Not Applicable
<b>Tel:</b>	Not Applicable
<b>Fax:</b>	Not Applicable
<b>e-mail:</b>	Not Applicable

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

Relevant Authority Notified	Yes	No
		√

**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 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 two copies of the application.

<b>Attachment included</b>	<b>Yes</b>	<b>No</b>
	√	

**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.

<b>Population Equivalent</b>	<b>2,600</b>
<b>Data Compiled (Year)</b>	<b>2007</b>
<b>Method</b>	<b>Hydraulic Flow Survey</b>

**B.9 (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 water habitat.

*The current population equivalent being treated at Millstreet WWTP is 2252 based on a flow survey carried out in 2007.*

*All developments with granted planning permission and all developments under construction have been included in the agglomeration. The additional p.e. due to the granted planning permissions is estimated at 350. There are currently no planning permissions granted in relation no non domestic activities.*

*At present Millstreet Wastewater Treatment Plant, is overloaded and therefore the plant does not have adequate capacity to accommodate any further loadings until the new wastewater treatment plant is commissioned.*

*Upon completion of the 4,100 p.e WWTP, the new plant shall have be capable of accommodating additional hydraulic and organic loading without posing an environmental risk to the receiving water habitat.*

**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.

<b>Class of waste water discharge</b>	<b>Fee (in €)</b>
	€25,000

<b>Appropriate Fee Included</b>	<b>Yes</b>	<b>No</b>
	√	

**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.

*Millstreet WWTP is due to be upgraded to a 4,100 PE plant in the next number of years. The Preliminary Report is being undertaken and is due to be submitted by March 2009 to the Department of Environment, Heritage & Local Government. The current programme anticipates construction / commissioning of the plant by end of 2012, however this assumes approval to proceed from the DoEH&LG.*

**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.

<b>Attachment included</b>	<b>Yes</b>	<b>No</b>
	√	

**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.

<b>Attachment included</b>	<b>Yes</b>	<b>No</b>
		√

**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 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.

<b>Attachment included</b>	<b>Yes</b>	<b>No</b>
		√

## SECTION C: INFRASTRUCTURE & OPERATION

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

### C.1 Operational Information Requirements

Provide a description of the plant, process and design capacity for the areas of the waste water works where discharges occur, to include a copy of such plans, drawings or maps, (site plans and location maps, process flow diagrams), and such other particulars, reports and supporting documentation as are necessary to describe all aspects of the area of the waste water works discharging to the aquatic environment. Maps and drawings must be no larger than A3 size.

#### C.1.1 Storm Water Overflows

For each storm water overflow within the waste water works the following information shall be submitted:

- An assessment to determine compliance with the criteria for storm water overflows, as set out in the DoEHLG *'Procedures and Criteria in Relation to Storm Water Overflows'*, 1995 and any other guidance as may be specified by the Agency, and
- Identify whether any of the storm water overflows are to be decommissioned, and identify a date by which these overflows will cease, if applicable.

#### C.1.2 Pumping Stations

For each pump station operating within the waste water works, provide details of the following:

- Number of duty and standby pumps at each pump station;
- The measures taken in the event of power failure;
- Details of storage capacity at each pump station;
- Frequency and duration of activation of emergency overflow to receiving waters. Clarify the location where such discharges enter the receiving waters.

**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.

## **General Description of the WWTP**

The wastewater treatment plant in Millstreet was constructed in the early 1970's on a level site adjacent to the Tanyard Stream, and approximately 0.7km to the north of the town centre. This replaced an older treatment system located closer to the town. The area of the current wastewater treatment plant site is 0.97 Ha. This includes an area of 0.28 Ha of undeveloped land to the north of the existing treatment structures.

The existing wastewater treatment process comprises an extended aeration system followed by settlement in twin hopper bottomed settlement tanks operated in parallel. No preliminary treatment (screening, grit removal or storm water separation) is provided.

The sewer from the eastern part of the town and the 225 mm diameter sewer from the western part of the town discharge into an inlet chamber upstream of a second storm overflow chamber (and downstream of the storm overflow chamber near the site entrance). Here excess flows overflow the sides of an overflow channel and are discharged to the nearby Tanyard Stream without any treatment. The remainder of the flow gravitates forward to the oxidation ditch for treatment.

The oxidation ditch is aerated using a single horizontal shaft rotor aerator. The oxidation ditch is 53.4 metres in length, 11.95 metres in width and 1.3 metres in depth. Mixed liquor overflows an adjustable weir into the settlement tank flow splitter chamber.

These are hopper shaped settlement tanks with an overall plan area of 65 m<sup>2</sup>. Here the sludge settles to the bottom of the tanks and the treated effluent is collected in two decanting channels that span the two tanks. The decanted effluent flows to a collection chamber from where it gravitates to the storm water chamber. From there the combined treated effluent and the storm water overflow gravitates to the existing short outfall in the adjacent Tanyard Stream that flows along the western boundary of the site.

The treated effluent pipe from the settlement tanks is 225 mm in diameter and this joins the 450 mm diameter storm overflow pipe approximately 19 m before discharging from the plant. This common outfall pipe is 450 mm in diameter and has a gradient of 1/173. This can accommodate a flow of approximately 218 l/s. At present, this pipe conveys the storm water overflow from the second storm overflow chamber, in addition to the treated effluent.

On visual inspection this pipe appeared to be in reasonable condition with no visible structural defects.

The settled sludge in the bottom of the settlement tanks is removed hydrostatically to a common sludge chamber from where it flows to the sludge lifting wheel. The sludge wheel lifts the sludge to a level from where it is continuously returned by gravity into the oxidation ditch. A separate outlet from the sludge wheel chamber diverts sludge to a pump sump. From here it is pumped to the sludge drying beds. This diversion is opened on a daily basis for approximately one hour.

There are six sludge drying beds on the site and these are fed sequentially. Their total combined plan area 150 m<sup>2</sup>. The dried sludge is then removed at

regular intervals and transported by tanker to Kanturk wastewater treatment plant for further treatment and dewatering. Between 35 and 55 m<sup>3</sup> of sludge are removed from the sludge drying beds each month.

The supernatant liquor that drains from the drying beds gravitates back to the oxidation ditch for full treatment.

The existing wastewater treatment plant is in reasonable structural condition, with all of the original system still in use.

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

### **General Description of the Pumping Stations**

There are four Council operated pumping stations and one privately operated pumping station located within the agglomeration of Millstreet.

#### **Mount Leader Pumping Station**

Grid Reference:

This pumping station caters for domestic and industrial effluent arising from south of Mount Leader Bridge. The sewerage is pumped to the nearby gravity sewerage system.

The Pumping Station consists of the following elements:

- 1 Nr pump complete with lifting chains
- 100mm PVC overflow pipe at the sump, overflowing to the adjacent Finnow River
- The capacity of the sump is estimated to be 7m<sup>3</sup>

#### **Killarney Road Pumping Station**

Grid Reference:

This Pumping Station caters for domestic and institutional effluent arising from the Inchilegh Bridge area. This pumping station replaced a old septic tank system.

The Pumping Station consists of the following elements:

- 2 Nr pump complete with lifting chains
- 225mm concrete overflow pipe at manhole entering overflows via the old septic tank sewer network and discharges to the Finnow River
- The capacity of the sump is estimated to be 9m<sup>3</sup>

#### **Drishane Pumping Station**

Grid Reference:

This Pumping Station caters for domestic effluent arising from the Drishane Area along the Mallow Road. The pumping Station consists of the following:

- 1 Nr pump
- Controlled by means of floats
- Sump size is 2m square by 3m deep

#### **Drominahilla Pumping Station**

Grid Reference:

This pumping station caters for a housing estate constructed in the mid 1990's by a private developer. The development has since been taken in charge by Cork County Council. The pumping Station consists of the following:

- 2 Nr pumps
- Controlled by means of floats
- Sump size is 2.1m diameter and 4.5m deep

#### **Tanyard Wood Pumping Station**

Grid Reference:

This pumping station has been recently constructed by a private developer to cater for the 124 Nr dwelling housing estate at Tantard Wood.

The Pumping Station consists of the following elements:

- 2 Nr pumps (duty / standby operation) with ASC Cutting System
- A modem & dial out unit is present at the pumping station
- Controlled by means of Cut in & Cut out float.
- High level alarm flashing beacon
- The size of the sump is 2.4m diameter x 6.9m deep
- 2 Nr 36m<sup>3</sup> overflow tanks

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.

#### Primary Discharge Point SW-01 Millstreet

<b>Type of Discharge</b>	450mm diameter concrete outfall pipe from wastewater treatment plant. Open pipe
<b>Unique Point Code</b>	SW - 01 MILL
<b>Location</b>	WWTP site Drominahilla, Millstreet, Co. Cork
<b>Grid ref (6E, 6N)</b>	127398E, 091013N

The primary discharge point, SW01-MILL, is the main outlet from Millstreet Wastewater Treatment Plant. The concrete outfall runs in a northerly direction approximately 30m from the outlet manhole across to the Tanyard Stream. The outlet pipe discharge effluent arising from the settlement tank and also from the storm overflow chamber. The point of discharge is an open pipe, which discharges directly to the river.

#### Storm Water Overflow Point SW-02 Millstreet

<b>Type of Discharge</b>	300mm diameter concrete overflow pipe from manhole at entry to WWTP site
<b>Unique Point Code</b>	SW - 02 Mill
<b>Location</b>	At entrance gate to WWTP along Station Road
<b>Grid ref (6E, 6N)</b>	127282E 090864N

Secondary discharge point, SW-02 is located at a manhole adjacent to the entrance gate to the WWTP site compound. The overflow discharges via a 300mm diameter concrete pipe of approximate distance of 4m. A second overflow pipe is also located at this manhole, namely SW-03 MILL.



*Storm Water Overflow Point SW-03 Millstreet*

<b>Type of Discharge</b>	225mm diameter PVC overflow pipe from manhole at entry to WWTP site
<b>Unique Point Code</b>	SW - 03 Mill
<b>Location</b>	At entrance gate to WWTP along Station Road
<b>Grid ref (6E, 6N)</b>	127282E 090864N

Secondary discharge point, SW-03 is located at a manhole adjacent to the entrance gate to the WWTP site compound. The overflow discharges via a 225mm diameter PVC pipe of approximate distance of 5m. A second overflow pipe is also located at this manhole, namely SW-02 MILL.

*Storm Water Overflow Point SW-04 Millstreet*

<b>Type of Discharge</b>	225mm diameter overflow pipe from manhole prior to entry to sump
<b>Unique Point Code</b>	SW - 04 Mill
<b>Location</b>	Killarney Road Pumping Station at Inchileigh Bridge
<b>Grid ref (6E, 6N)</b>	126345E 090483N

Secondary discharge point SW-04 MILL, is located at the final manhole on the gravity sewer line prior to the sump chamber at Killarney Road Pumping Station. The overflow discharges via a 225mm pipework for a distance of 250m in a westerly direction to the River Finnow.

*Storm Water Overflow Point SW-05 Millstreet*

<b>Type of Discharge</b>	100mm diameter overflow pipe from sump
<b>Unique Point Code</b>	SW - 05 Mill
<b>Location</b>	Mount Leader Pumping Station adjacent to Mount Leader Bridge
<b>Grid ref (6E, 6N)</b>	126808E 089966N

Secondary discharge SW-05 MILL, is a 100mm diameter PVC overflow pipe from the sump at Mount Leader Pumping Station. The overflow is located at a high level within the sump. The discharge point runs in a north easterly direction for an approximate distance of 40m long.

*Storm Water Overflow Point SW-06 Millstreet*

<b>Type of Discharge</b>	300mm diameter storm overflow pipe from manhole
<b>Unique Point Code</b>	SW - 06 Mill
<b>Location</b>	Station Road. 95m & 60m away from junction of Coologane St & Station Road
<b>Grid ref (6E, 6N)</b>	

The Secondary discharge point SW-06 MILL, is an open pipe overflow from the overflow manhole along Station road. The manhole's are located approximately 60 & 95m form the junction of Station Road and Coologane Street. The overflow

runs approximately runs approximately 70m before joining the Old Mill Race, which in turn discharges to the Tanyard Stream.

**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
		√



*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 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/](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.**

**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/](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	Yes	No

**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
SW01-MILL	Primary	Cork County Council	Stream	Tanyard		127398	091013
SW02 -MILL	Storm	Cork County Council	Stream	Tanyard		127282	090864
SW03 -MILL	Storm	Cork County Council	Stream	Tanyard		127282	090864
SW04 -MILL	Storm	Cork County Council	River	Finnow		126345	090483
SW05 -MILL	Storm	Cork County Council	River	Finnow		126808	089966
SW06 -MILL	Storm	Cork County Council	Stream	Tanyard			

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](http://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.

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

**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/](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/](http://78.137.160.73/epa_wwd_licensing/).

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

**E.2. Monitoring and Sampling Points**

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.

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

**Attachment E.2** should contain any supporting information.

Attachment included	Yes	No
	√	

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

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

PT_CD	PT_TYPE	MON_TYPE	EASTING	NORTHING	VERIFIED
SW01	Primary	Sampling			N
aSW01u	u/s	Sampling	126474	090360	N
aSW01d	d/s	Sampling	128334	092423	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](http://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
	√	

## **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/](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.
- 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<sup>1</sup> 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<sup>2</sup>;

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

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



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

The plant is under pressure with regard to capacity however results indicate that at present and operating within the requirements of the following legislation. Millstreet WWTP is due to be upgraded in 2011 to a 4,100PE and this should result in a significant improvement in the operation of the Millstreet WWTP.

### **Water Quality Standards**

The Water Framework Directive (WFD) aims to establish an integrated approach to water protection, improvement and sustainable use. In order to achieve the requirements of the WFD, Ireland has been divided into a number of River Basin Districts or management units. The South Western River Basin District (SWRBD) comprises substantially the counties of Cork and Kerry, all of Cork City, and also parts of counties Limerick, South Tipperary and Waterford.

The Tanyard Stream which is a tributary of the Finnow River is included in the SWRBD. The overall objectives of the SWRBD project include the following:

- Strengthen compliance with EU Directives and national legislation
- Collect and analyse information to determine water quality and identify possible threats to water status
- Prevent further deterioration and protect/enhance water quality
- Develop a programme of measures to address all significant pressures and sources of impact on aquatic ecosystems and groundwater
- Encourage and facilitate public participation including the maintenance of a project website
- Promote sustainable water use

In order to achieve these objectives the following project tasks have been identified:

- Identify pressures on water bodies and assess risk of not achieving compliance with the Water Framework Directive
- Prepare a Characterisation Report
- Identify Heavily Modified (HMWB) and Artificial Water Bodies (AWB)
- Establish risk to waters from Hazardous Substances
- Establish data management system and GIS
- Prepare programme of measures
- Review of monitoring needs
- Design monitoring programme
- Prepare River Basin Management Strategy
- Assist public participation in the project
- Prepare printed reports
- Assist capacity building

The SWRBD has proposed water quality standards for the Tanyard Stream and Finnow River under a water quality / catchments management plan. The Tanyard Stream and Finnow River is classified as Moderate ecological quality status due to its location in a *Margaritifera margaritifera* (freshwater pearl mussel) catchment. (Q-status is good, however this is overwritten by pearl

mussel status.) *Margaritifera margaritifera* is a protected area and for such sites the water quality standards that need to be achieved will be higher than for other areas as these are a species of high conservation importance.

The River Basin Management System currently being developed will include a programme of measures and a River Basin Management Strategy, designed to achieve at least good status for all waters by 2015, and to maintain high status where it exists. Therefore discharges from Millstreet Wastewater Treatment Plant cannot cause deterioration in good water quality under the Water Framework Directive at present.

The Tanyard Stream and Finnow River is not a designated Shellfish area under the Shellfish Waters Regulations, S.I.200 of 1994. The River Blackwater, into which the Finnow River flows, is also not designated under these regulations.

The Tanyard Stream and Finnow River is not designated a Salmonid Water under Salmonid Water Regulations, S.I. 293 of 1988, however the River Blackwater which the Finnow River joins, is designated Salmonid Water under Salmonid Water Regulations, S.I. 293 of 1988.

The Tanyard Stream and Finnow River is not designated a Bathing Water under the Bathing Water Regulations, S.I. 178 of 1998 as amended.

The Tanyard Stream and Finnow River is not a designated Sensitive Area under the Urban Wastewater Treatment Regulations 2001 (S.I. 254 of 2001). The River Blackwater downstream of Mallow Railway to Ballyduff Bridge is a designated Sensitive Area. This is not within 2km of any discharge point from Millstreet Wastewater Treatment wastewater works.

Approximately 1km west of Millstreet Town, Tubrid (Millstreet) PWS is located. This is a Spring water supply and the Finnow River flows adjacent to the Spring Area. The location is upstream of the discharge point of Millstreet WWTP.

### **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 Protected Areas.

#### *Special Areas of Conservation*

Candidate Special Areas of Conservation (cSACs) are protected under the European Union (EU) Habitats Directive (92/43/EEC), as implemented in Ireland by the European Communities (Natural Habitats) Regulations, 1997.

The Blackwater River cSAC (Site Code: 002170) is very large, extending from the tidal estuary of the river at Youghal Co. Cork to the upper tributaries and their flood plains, in Cos. Cork Kerry, Limerick, Tipperary and Waterford, including the Awbeg River is a designated Special Area of Conservation.

The cSAC is designated on the basis of the presence of a large number of EU Habitats Directive Annex 1 habitats and Annex 2 species. Many of these are estuarine habitats and species found only in the lower reaches of the River Blackwater, however a number may be present in the Finnow River section of the cSAC including, for example the Annex 1 habitats, 'alluvial wet woodlands', 'floating river vegetation', and 'old oak woodlands'; and the Annex 2 species sea

lamprey, river lamprey, brook lamprey, Atlantic salmon, freshwater pearl-mussel and otter.

The Blackwater River Site Synopsis is included in this attachment.

*Natural Heritage Areas*

The Tanyard Stream and Finnow River does flow through a Proposed Natural Heritage Areas (NHA). Natural 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.

Under the Wildlife Amendment Act 2000, NHAs are legally protected from damage from the date they are formally proposed for designation.

*Special Protected 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.

No designated special protected areas are located along the Tanyard Stream and Finnow River. There are areas of the River Blackwater that are designated SPAs, however these are located downstream of Fermoy and therefore greater than 2km from all discharge points.

**Receiving Water Quality Requirement**

Water Quality analysis data for the Finnow River was obtained from Cork County Council. There are no sampling points on the Tanyard Stream. The EPA also takes samples from two locations along the Finnow River. In the vicinity of the treatment plant, two nr monitoring stations are relevant to Millstreet WWTP. These stations are the flowing:

- Inchileigh Bridge – upstream of confluence of Tanyard Stream and Finnow River by approximately 4.7km
- Br u/s Blackwater River Confluence – downstream of confluence of Tanyard Stream and Finnow River by approximately 0.6km

*Table F1-1: Biological Quality Rating for Finnow River – Upstream & Downstream of Discharge*

Sampling Location	EPA Biological Quality Rating (Q values)			
	1995 -1997	2001 – 2003	2006	Target
Inchileigh Bridge	5	4-5	4	5
Br u/s Blackwater River Confluence	4	4-5 (LHS) 2 (RHS)	4 Overall	4

The Royal Commission in its report on Water Quality Guidelines recommends that "in all circumstances effluent discharges which are calculated to raise the BOD of the receiving water, outside the mixing zone, by more than 1 mg/l should be discouraged". The average existing background level for BOD is estimated at 1mg/l. Therefore the receiving water limiting value for BOD for this river is 2mg/l.

The standard water quality requirements for dangerous substances are based on the Water Quality (Dangerous Substances) Regulations 2001.

Hence, the principal receiving water quality requirements are given in Table 3 below: -

Table F1-2: Receiving Water Quality Limiting Values

Parameter	Water Quality Standard (mg/l)
Chromium	30
Copper	30
Lead	10
Nickel	50
Zinc	100

**Based on Hardness of receiving waters >100mg/l CaCO3**

**Effluent Standards**

The treated effluent quality requirements shown in the table below are determined with respect to the EC Urban Wastewater Directive, given effect in Irish Law by S.I.254 of 2001.

Table F1-3: Minimum Effluent Standards based on S.I.254 of 2001 and Recorded Effluent Concentrations

Parameter	Effluent Standards (mg/l)	Actual Concentrations* (mg/l)
Biological Oxygen Demand (BOD)	25	14.46
Suspended Solids (SS)	35	69.2

\*Actual Concentration is the average effluent concentrations recorded at the outlet of the WWTP by Cork County Council Wastewater Laboratory during the period Apr '08 to Dec '08.

From Table 4 above, it is evident that treated effluent from the Millstreet wastewater treatment plant is compliant with the quality of effluent standards set out in the above legislation.

**Assimilative Capacity of the Receiving Water**

a) **Mass Balance Equation for Orthophosphate:**

Median flow of River = 0.101 m<sup>3</sup>/sec  
 Median oPO<sub>4</sub>-P in River (upstream) = 0.05 mg/L

Average volume of discharge = 0.007 m<sup>3</sup>/sec  
 Median value for oPO<sub>4</sub>-P in discharge = 1.24 mg/L

$$C_{\text{final}} = \frac{(0.101 \times 0.05) + (0.007 \times 1.24)}{0.101 + 0.007}$$

$$C_{\text{final}} = 0.13\text{mg/L oPO}_4\text{-P}$$

The increase in Orthophosphate due to the discharge of Millstreet WWTP is 80  $\mu\text{g/L}$ .

b) **Mass Balance Equation for BOD:**

Flow of River (95%) = 0.01 m<sup>3</sup>/sec  
 Average BOD in River (upstream) = 1.51 mg/L

Average volume of discharge = 0.007 m<sup>3</sup>/sec  
 Average BOD in discharge = 14.46 mg/L

$$C_{\text{final}} = \frac{(0.01 \times 1.015) + (0.007 \times 14.46)}{0.01 + 0.007}$$

$$C_{\text{final}} = 6.55 \text{ mg/L BOD}$$

The increase in BOD due to the discharge of Millstreet WWTP is 5.04 mg/L.

c) **Mass Balance Equation for Suspended Solids:**

Flow of River (95%) = 0.01 m<sup>3</sup>/sec  
 Average Suspended Solids in River (upstream) = 4.17mg/L

Average volume of discharge = 0.007 m<sup>3</sup>/sec  
 Average Suspended Solids in discharge = 69.2mg/L

$$C_{\text{final}} = \frac{(0.01 \times 4.17) + (0.007 \times 69.2)}{0.01 + 0.007}$$

$$C_{\text{final}} = 30.95 \text{ mg/L Suspended Solids}$$

The increase in Suspended Solids due to the discharge of Millstreet WWTP is 26.77 mg/L.

d) **Mass Balance Equation for Total Phosphate:**

50% Median flow of River = 0.101m<sup>3</sup>/sec  
 Median TPO<sub>4</sub>-P in River (upstream) = 0.2 mg/L

Average volume of discharge = 0.007 m<sup>3</sup>/sec  
 Median TPO<sub>4</sub>-P in discharge = 2.36 mg/L

$$C_{\text{final}} = \frac{(.101 \times 0.2) + (0.007 \times 2.36)}{0.101 + 0.007}$$

$$C_{\text{final}} = 0.34 \text{ mg/L TPO}_4\text{-P}$$

The increase in Total Phosphate due to the discharge of Milsstreet WWTP is 140  $\mu\text{g/L}$ .

e) **Mass Balance Equation for Total Nitrogen:**

Flow of River (95%) = 0.01 m<sup>3</sup>/sec

Average Total Nitrogen in River (upstream) = 3.65 mg/L

Average volume of discharge = 0.007 m<sup>3</sup>/sec

Average Total Nitrogen in discharge = 18.3 mg/L

$$C_{\text{final}} = \frac{(0.01 \times 3.65) + (0.007 \times 18.3)}{0.01 + 0.007}$$

$$C_{\text{final}} = 9.68 \text{ mg/L Total Nitrogen}$$

The increase in Total Nitrogen due to the discharge of Millstreet WWTP is 6.03 mg/L.

f) **Mass Balance Equation for Sulphate:**

Flow of River (95%) = 0.01 m<sup>3</sup>/sec

Average Sulphate in River (upstream) = 30 mg/L

Average volume of discharge = 0.007 m<sup>3</sup>/sec

Average Sulphate of discharge = 30 mg/L

Average Sulphate in River (downstream) = 30 mg/L

$$C_{\text{final}} = \frac{(0.01 \times 30) + (0.007 \times 30)}{0.01 + 0.007}$$

$$C_{\text{final}} = 30.0\text{mg/L Sulphate}$$

The increase in Sulphate due to the discharge of Millstreet WWTP is 0.0mg/L.

g) **Mass Balance Equation for Ammonia-N:**

Flow of River (95%) = 0.01 m<sup>3</sup>/sec

Average Ammonia-N in River (upstream) = 0.1 mg/L

Average volume of discharge = 0.007 m<sup>3</sup>/sec

Average Ammonia-N in discharge = 5.875 mg/L

Average Ammonia-N in River (downstream) = 0.26 mg/L

$$C_{\text{final}} = \frac{(0.01 \times 0.1) + (0.007 \times 5.875)}{0.01 + 0.007}$$

C<sub>final</sub> = 2.48 mg/L Ammonia

The increase in Ammonia due to the discharge of Millstreet WWTP is 2.38mg/L.

Assimilative Capacity Calculations were not performed for the following parameters, as the substances were below the limit of detection in the upstream samples, in the discharge samples and in the downstream samples:

- (a) Chromium
- (b) Copper
- (c) Lead
- (d) Nickel
- (e) Cadmium
- (f) Barium
- (g) Boron
- (h) Zinc
- (i) Fluoride

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

***Discharges in proximity of Wastewater Works***

Water quality analysis data presented in Tables 5 & 6 below was recorded by Cork County Council wastewater laboratory and covers a sampling period from April 2008 to July 2008.

*Table F1-5: Upstream Water Quality*

Parameter	Upstream Monitoring Station				
	08/03/08	14/02/08	18/09/08	13/11/08	27/11/08
Ph	7.2	7.9	-	7.3	7.6

BOD	<1.0	1.06	1.0	-	<1.0
SS	7	2.5	-	-	3
Ammonia	<0.1	<0.1	-	<0.1	<0.1
Ortho-Phosphate	-	<0.05	<0.05	<0.05	<0.05

Table F1-6: Downstream Water Quality

Parameter	Downstream Monitoring Station				
	08/03/08	14/02/08	18/09/08	13/11/08	27/11/08
Ph	7.3	7.9	-	7.4	7.7
BOD	<1.0	5.89	1.0	-	<1.0
SS	4	2.5	-	-	5
Ammonia	<0.1	0.9	-	<0.1	<0.1
Ortho-Phosphate	-	0.12	<0.05	<0.05	<0.05

The data in the above tables confirms the wastewater discharge has little effect on the overall river quality given adequate flow in the river and dispersion time.

Attachment included	Yes	No
		√

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

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

ABS_CD	AGG_SERVED	ABS_VOL	PT_CD	DIS_DS	EASTING	NORTHING	VERIFIED
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](http://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 or downgradient of the discharge point.

**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 (79/923/EEC).

The plant is under pressure with regard to capacity however results indicate that at present and operating within the requirements of the following legislation. Millstreet WWTP is due to be upgraded in 2011 to a 4,100PE and this should result in a significant improvement in the operation of the Millstreet WWTP.

### Water Framework Directive 2000/60/EC

The Water Framework Directive (WFD) aims to establish an integrated approach to water protection, improvement and sustainable use. In order to achieve the requirements of the WFD, Ireland has been divided into a number of River Basin Districts or management units. The South Western River Basin District (SWRBD) comprises substantially the counties of Cork and Kerry, all of Cork City, and also parts of counties Limerick, South Tipperary and Waterford.

The overall objectives of the South Western River Basin District project include the following:

- Strengthen compliance with EU Directives and national legislation
- Collect and analyse information to determine water quality and identify possible threats to water status
- Prevent further deterioration and protect/enhance water quality
- Develop a programme of measures to address all significant pressures and sources of impact on aquatic ecosystems and groundwater
- Encourage and facilitate public participation including the maintenance of a project website
- Promote sustainable water use

In order to achieve these objectives the following project tasks have been identified:

- Identify pressures on water bodies and assess risk of not achieving compliance with the Water Framework Directive
- Prepare a Characterisation Report
- Identify Heavily Modified (HMWB) and Artificial Water Bodies (AWB)
- Establish risk to waters from Hazardous Substances
- Establish data management system and GIS
- Prepare programme of measures
- Review of monitoring needs
- Design monitoring programme
- Prepare River Basin Management Strategy
- Assist public participation in the project
- Prepare printed reports
- Assist capacity building

The EPA also takes samples from one location along the Finnow River downstream (d/s) of the WWTP (after confluence of Tanyard Stream & blackwater). These are located at the following:

- Br u/s of Blackwater River Confluence

Table G1-1: Upstream Water Quality

Parameter	Upstream Monitoring Station				
	08/03/08	14/02/08	18/09/08	13/11/08	27/11/08
Ph	7.2	7.9	-	7.3	7.6
BOD	<1.0	1.06	1.0	-	<1.0
SS	7	2.5	-	-	3
Ammonia	<0.1	<0.1	-	<0.1	<0.1
Ortho-Phosphate	-	<0.05	<0.05	<0.05	<0.05

Table G1-2: Downstream Water Quality

Parameter	Downstream Monitoring Station				
	08/03/08	14/02/08	18/09/08	13/11/08	27/11/08
Ph	7.3	7.9	-	7.4	7.7
BOD	<1.0	5.89	1.0	-	<1.0
SS	4	2.5	-	-	5
Ammonia	<0.1	0.9	-	<0.1	<0.1
Ortho-Phosphate	-	0.12	<0.05	<0.05	<0.05

The data in the above tables confirms the wastewater discharge has little effect on the overall river quality given adequate flow in the river and dispersion time.

### Birds Directive 79/409/EEC

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.

No designated special protected areas are located along the Tanyard Stream or Finnow River. There are areas of the River Blackwater which are designated

SPAs however these are located downstream of Fermoy and therefore, greater than 2km from all discharge points.

**Groundwater Directives 2006/118/EC**

The Groundwater Directive 2006/118/EC has been developed in response to the requirements of Article 17 of the Water Framework Directive: Strategies to prevent and control pollution to groundwater. Groundwater Quality standards are to be established by the end of 2008.

Tubrid (Millstreet) Spring is the closest PWS that utilise ground water for medium sized water supplies.

With the proper mitigation measures in place the operation of the wastewater treatment plant does not have any significant negative impacts on the existing groundwater.

**Drinking Water Directives 80/778/EEC**

There are no areas along the Tanyard Stream, Finnow River or River Blackwater downstream of Millstreet WWTP designated for the abstraction of water intended for human consumption.

**Urban Waste Water Treatment Directive 91/271/EEC**

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

Article 4(1)(c) states that "In the case of urban wastewater entering collecting systems, a sanitary authority shall provide treatment plants, which provide for secondary treatment or an equivalent treatment by 31 December 2005 in respect of all discharges to freshwaters and estuaries from agglomerations with a population equivalent of between 2,000 and 10,000."

Millstreet Wastewater Treatment Plant was commissioned in the 1970's and was designed to treat effluent to a 25/35ppm standard.

The Second Schedule (Part 1) of the 2001 Regulations states that effluent should be treated to the following standards.

*Table G1-3: Minimum Effluent Standards based on SI 254 of 2001*

<b>Parameter</b>	<b>Conc. (mg/l)</b>	<b>Minimum Percentage of Reduction</b>
Biochemical Oxygen Demand (BOD)	25	70 - 90
Chemical Oxygen Demand (COD)	125	75
Suspended Solids	35	90

The aeration and clarifying plant at the Millstreet wastewater treatment plant is treating effluent to a high standard. Efficiencies of BOD, COD and SS removal for the plant is typically in excess of 85%. The effect of the discharges on the quality of the receiving waters is assessed in Attachment F1.

The Third Schedule of the 2001 Regulations gives a list of Sensitive areas.

Article 4(2)(a) states that all discharges into Sensitive Areas require more stringent treatment than secondary treatment. The Tanyard Stream or Finnow River is not a designated Sensitive Area. The River Blackwater downstream of Mallow Railway Bridge to Ballyduff Bridge is designated a Sensitive Area. This is not within 2km of any discharge point from the Millstreet wastewater treatment works.

The Fifth Schedule of the 2001 Regulations gives a methodology for monitoring the final effluent from the wastewater treatment plant. Item 3 states "The minimum annual number of samples shall be determined according to the size of the treatment plant and be collected at regular intervals during the year." For a PE of between 2000-9999 4 samples should be taken each year. Cork County Council wastewater laboratory carries out regular testing at the outlet of the treatment plant.

### **Shellfish Directive 79/923/EEC**

The Tanyard Stream or Finnow River is not a designated Shellfish Area under the Shellfish Waters Regulations, S.I. 200 of 1994. The River Blackwater, into which the Finnow River, flows is also not designated under these regulations.

### **Habitats Directive 92/43/EEC**

Candidate Special Areas of Conservation (cSACs) are protected under the European Union (EU) Habitats Directive (92/43/EEC), as implemented in Ireland by the European Communities (Natural Habitats) Regulations, 1997.

The Blackwater River cSAC (Site Code: 002170) is very large, extending from the tidal estuary of the river at Youghal Co. Cork to the upper tributaries and their flood plains, in Cos. Cork Kerry, Limerick, Tipperary and Waterford.

The cSAC is designated on the basis of the presence of a large number of EU Habitats Directive Annex 1 habitats and Annex 2 species.

The Blackwater River Site Synopsis is included in this attachment.

### **Environmental Liabilities Directive 2004/35/EC**

The Environmental Liability Directive is about preventing and remedying environmental damage. It aims to hold operators whose activities have caused environmental damage financially liable for remedying this damage, and it aims to hold those whose activities have caused an imminent threat of environmental damage liable for taking preventive actions.

Cork County Council Wastewater Laboratory carries out monitoring of the effluent from the wastewater treatment plant on a regular basis.

Failure to meet the specified treated effluent standards may result in final penalties to Cork County Council. As a result, the risk of environmental pollution from the treatment plant may be reduced.

### **Bathing Water Directive 76/160/EEC**

The Tanyard Stream or Finnow River is not designated a Bathing Water under the Bathing Water Regulations, S.I. 178 of 1998 as amended.

**Dangerous Substances Directive 2006/11/EC**

The level of dangerous substances in both the effluent discharged from Millstreet wastewater treatment plant and the river itself is significantly lower than the concentration limits set in the directive.

**Attachment G.1** should contain the most recent programme of improvements, including a copy of any approved funding for the project and a timeframe for the completion of the necessary works to take place.

Attachment included	Yes	No
	√	

**G.2 Compliance with 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.

**Receiving Water Quality Requirement based on Phosphorus Regulations 2008**

The effluent arising from the WWTP is discharge to the Tanyard Stream, which flows adjacent to the WWTP site boundary. The Tanyard Stream is a tributary of the Finnow River is a tributary of the Blackwater River (Munster).

The EPA have two number stations on the Finnow River, upstream along the Finnow the Q value of the river is 4, while downstream of the River the Q value is 4.

**Effluent Standards**

The treated effluent quality requirements are determined with respect to the EC Urban Wastewater Directive, given effect in Irish Law by S.I.254 of 2001. The wastewater treatment processes should reduce nutrients in the final effluent. The minimum effluent standard based on S.I.254 of 2001 for Phosphorus in wastewater effluent is 2mg/l.

As a natural consequence of secondary treatment, there will be an uptake of phosphorous for biomass synthesis at the wastewater treatment plant in Buttevant This is evident from Tables 3 &4 below showing the uptake of phosphorus through the wastewater treatment plant.

*Table G2-3: Phosphorus Levels in Influent to WWTP*

Parameter	Inlet Monitoring Station	
	02/08	11/08
Ortho-Phosphate	2.43	13.16

Table G2-4: Phosphorus Levels in Effluent from WWTP

Parameter	Outlet Monitoring Station	
	06/08	07/08
Ortho-Phosphate	2.3	1.03

From above, it is evident that treated effluent from the Millstreet wastewater treatment plant is compliant with the quality of effluent standards set out in the Urban Waste Water Directive criteria for discharges to sensitive water even though this designation does not apply for this area.

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

Attachment included	Yes	No
		√

**G.3 Impact Mitigation**

Provide details on a programme of improvements to ensure that discharges from the agglomeration will not result in significant environmental pollution.

The current population equivalent being treated at Millstreet WWTP is 2252 based on a flow survey carried out in 2007.

All developments with granted planning permission and all developments under construction have been included in the agglomeration. The additional p.e. due to the granted planning permissions is estimated at 350. There are currently no planning permissions granted in relation no non domestic activities.

At present Millsreet Wastewater Treatment Plant, is overloaded and therefore the plant does not have adequate capacity to accommodate any further loadings until the new wastewater treatment plant is commissioned.

Upon completion of the 4,100 p.e WWTP, the new plant shall have be capable of accommodating additional hydraulic and organic loading without posing an environmental risk to the receiving water habitat.

These projects were upgraded under the Water Services Investment Programme 2007 -2009.

With these proposed improvements to the WWTP it will ensure that discharges from the agglomeration will not result in significant environmental pollution.

**Attachment G.3** should contain the most recent programme of improvements, including a copy of any approved funding for the project and a timeframe for the completion of the necessary works to take place.

Attachment included	Yes	No
	√	

**G.4 Storm Water 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.

*There are no programme of improvement in relation to the storm overflows, however as previously indicated in Section B10, a Preliminary Report is due to be submitted to the DOEHLG in March 2009, in relation to the Millstreet Wastewater Treatment Plant and collection system.*

**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
	√	

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

**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.

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

**Print signature name:** \_\_\_\_\_

**Position in organisation:** \_\_\_\_\_

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



**SECTION I: JOINT DECLARATION**

**Joint Declaration** <sup>Note1</sup>

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:** \_\_\_\_\_

**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.

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