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13/09/2019

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RE: Millstreet Waste Water Discharge Licence Review Application (D0332-01)

Please find attached the waste water discharge licence review application for Millstreet Agglomeration (D0332-01) in accordance with the Waste Water Discharge Authorisation Regulations, 2007 (S.I. No. 684 of 2007), as amended.

Irish Water are seeking the Agency to prioritise this review application so to regularise the new outfall location in line with the discharge licence, and the upgrade and changes proposed.

I confirm that the content of the electronic files on the accompanying CD-ROM is a true copy of the original application form.

There are 2 hard copies and 2 electronic copies of this application.

A fee of €20,000 was receipted and made electronically.

I trust the above is satisfactory.

Yours Sincerely,



Peter Keegan

Environmental Licensing Specialist



MILLSTREET WASTEWATER WORKS

WASTE WATER DISCHARGE LICENCE REVIEW

IRISH WATER

SEPTEMBER 2019

This is a draft document and is subject to revision.



Waste Water Discharge Licence Application Form

EPA Ref. N^o:
(Office use only)

Environmental Protection Agency
PO Box 3000, Johnstown Castle Estate, Co. Wexford
Lo Call: 1890 335599 Telephone: 053-9160600 Fax: 053-9160699
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Tracking Amendments to Draft Application Form

Version No.	Date	Amendment since previous version	Reason
V. 2.0	05/10/2017	N/A	

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

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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 as amended, 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 <http://www.epa.ie/pubs/forms/lic/wwda/>.

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

This Application Form does not purport to be, and should not be considered, a legal interpretation of the provisions and requirements of the Waste Water Discharge (Authorisation) Regulations 2007 as amended. While every effort has been made to ensure the accuracy of the material contained in this 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 as amended, and is summarised below. The application fees that shall accompany an application are listed in the Third Schedule to the Regulations.

Prior to submitting an application the applicant must publish (within the two weeks prior to date of application) in a newspaper circulating in the area, and erect at the point nearest to the waste water treatment plant concerned or, if no such plant exists, at a location nearest the primary discharge point, a notice of intention to apply.

An application for a licence must be submitted using this application form 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 as amended.

The provision of information in an application for a waste water discharge licence which is false or misleading is an offence under

Regulation 35 of the Waste Water Discharge (Authorisation) Regulations 2007 as amended.

Note: 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 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.

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.

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,
- type of discharge, i.e., continuous, tidal, intermittent,
- the hours during which the waste water works is supervised or manned and days per week of this supervision,
- in the event that this is a review application, state the grounds for which this review application is being made.

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

A.1 Reason for Licence Review

The Agency issued a waste water discharge licence for Millstreet waste water treatment plant (WWTP) in February 2014 (Authorisation reference D0332-01). Schedule C of the licence requires improvement works to the existing WWTP and relocation of the primary discharge from the Tanyard stream to the Finnow River. Irish Water now requests authorisation to relocate the primary outfall to the Finnow River, Finnow Bridge, which is a different location to that authorised in the licence.

A.2 Description of the Waste Water Treatment Works

Millstreet is a key settlement for rural North Cork and is located approximately 50km from Cork City and 20km north of Macroom. The wastewater treatment plant (WWTP) is located approximately 0.7km north of the town centre adjacent to the Tanyard Stream.

The original WWTP was constructed in the 1970s and was designed for a population Equivalent (PE) of 1600. The plant is currently being upgraded to a design capacity of 3,220 PE, with an anticipated completion date of Quarter 1 2020, subject to the work being progressed as expected. The description provided below is for the upgraded plant.

The collection system in Millstreet is a partially combined network and includes four wastewater pumping stations within the network. All flows to the WWTP are by two gravity inlet sewers.

The treatment process will comprise the following:

- 1 Inlet pumping station with screened storm overflow
- 2 Screening and grit removal
- 3 Storm holding tank with two hours storage
- 4 Two process streams comprising an Anoxic Tank, Aeration Tank and Settlement Tank for nitrogen and BOD removal.
- 5 Ferric dosing for Phosphorus removal.
- 6 Sludge treatment including sludge import facility, sludge thickener and sludge storage tank.
- 7 Final effluent pumping station
- 8 New primary discharge location at the River Finnow

The treated effluent will be pumped to a new outfall at the River Finnow located at Finnow Bridge. The primary discharge is being relocated from the Tanyard stream to the River Finnow. A new screened storm overflow from the inlet and storm tank overflow will discharge to the Tanyard stream via the existing outfall.

The current upgrades are designed to cater for the anticipated growth in loading to the plant over a 10-year design horizon. The plant has been designed to facilitate a future expansion to a 30-year design horizon. These works are currently underway with testing scheduled to commence in Quarter 4 2019 and are expected to be complete and commissioned by Quarter 1 2020, subject to the work being progressed as expected.

A.3 Sources of Emissions

The discharges from the network and WWTP are set out in the table below.

Reference	Type	Discharge Location	Easting	Northing	Description
<i>New - to be constructed</i>					
SW001	Primary	Finnow River at Finnow Bridge	126674	092040	Treated effluent outfall
<i>Existing - to be decommissioned</i>					
SW002	Storm Water Overflow	Tanyard stream at WWTP Entrance	127282	090864	To be decommissioned
SW003	Storm Water Overflow	Tanyard Stream at WWTP Entrance	127282	090864	To be decommissioned
<i>Existing- To be retained</i>					
SW004	Dual Function overflow (SWO and EO)	Finnow River at Killarney Road	126345	090483	Existing overflow at pumping station
SW005	Dual Function overflow (SWO and EO)	Finnow river at Mountleader Bridge	126808	089966	Existing overflow at pumping station – being upgraded
SW006	Storm Water Overflow	Drain to Tanyard stream at Station Road (upstream of	127330	090754	Existing overflow in sewerage network

		WWTP)			
SW010	Storm Water Overflow	Drain to Tanyard stream at Station Road (upstream of WWTP)	127330	090754	Existing overflow in sewerage network
SW008	Storm Water Overflow	Tanyard stream adjacent to Dairygold	127826	090348	Existing overflow in sewerage network
<i>Existing - to be repurposed</i>					
SW007	Dual Function overflow (SWO and EO)	Tanyard stream at WWTP	127398	091013	Overflow at WWTP Inlet Pumps
<i>New - to be constructed, to use existing outfall</i>					
SW009	Storm Water Overflow	Tanyard stream at WWTP	127398	091013	Overflow at WWTP Storm Tank

A.4 The Nature and Quantities of Emissions

The nature of the wastewater generated in Millstreet is predominantly domestic type wastewater. The loading to the WWTP can increase during events at the event centre in the town, and this has been factored into the design loading of the plant. The current organic loading is typically 2,032 PE excluding the event centre load. The proposed plant will be capable of accommodating loading of 3,220 PE.

Flows of up to 78 l/s arriving at the inlet pumping station are forwarded to preliminary treatment (screening and grit removal) and flows in excess of 78 l/s overflow from the inlet pump station to the Tanyard stream via bar screen to SW007.

Flows up to 50 l/sec gravitate from the preliminary treatment works to full tertiary treatment and flows exceeding 50 l/s discharging by gravity to the storm holding tank. Treated effluent is pumped to the Finnow River and discharged at the primary discharge outfall (SW001). The storm holding tank has a storage capacity of 2hrs at 3DWF. Storm flows will be pumped back in to the works for treatment when capacity allows. The storm tank has an overflow to the Tanyard Stream via SW009 (same pipe as SW007) in the event that capacity is reached.

Flows will overflow via SW007 in emergency situations such as pump failure.

The proposed Emission Limit Values for the Primary Discharge (SW001) are:

Parameter	Units	Limit
cBOD	mg/l	25.0
COD	mg/l	125.0
Suspended Solids	mg/l	25.0
Ammonia (N)	mg/l	1.0
Orthophosphate (P)	mg/l	0.5
pH	-	6 – 9

The new outfall will be located at Finnow Bridge, which is approximately 2km upstream of the confluence with the Blackwater River. As such there will be an increased volume of water in which to assimilate the discharge in advance of the confluence with the main channel of the Blackwater River.

Waste Assimilative Capacity (WAC) calculations were carried out to assess the effect that the primary discharge could have on the quality of the River Finnow. The WAC calculations show that the discharge from the Millstreet WWTP to the Finnow River will not affect the Water Framework Directive (WFD) status of the river. Further detail can be found in Section D of this application.

A.5 Proposed Technology

The treatment process includes screening and grit removal, biological treatment with carbonaceous oxidation, nitrification and denitrification, and phosphorus removal. The WWTP will be maintained and operated to ensure compliance with the waste water discharge licence.

A.6 Further measures planned to ensure that no significant pollution is caused

There are currently no proposals for further measures beyond upgrading the plant for 10-year horizon, with a design that can accommodate future modular expansion to provide for the 30-year horizon.

A.7 Measures planned to monitor emissions into the environment

The monitoring of the primary discharge and the ambient water quality in the River Finnow will be carried out in accordance with licensing requirements.

A.8 Type of Discharge

The primary discharge will be intermittent in dry weather and continuous during periods of rainfall. The storm water overflow discharges will be intermittent.

A.9 Hours of Supervision

The site will be manned on a part-time basis, typically for a few hours per normal working day depending on ongoing maintenance activities. Operational staff will be on call 24 hours per day, seven days per week.

Refer to **Attachment A.1** for a map showing the location of the WWTP.

SECTION B: GENERAL

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

B.1 Application Type

Is this a review application?	Yes	No
	✓	

If yes, provide the following information:

EPA Licence Register Number	D0332-01
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State the grounds for which this review application is being made:

Waste water treatment plant upgrade, relocation of the primary discharge in the River Finnow and network improvements

B.2 Agglomeration Details

Name of Agglomeration	Millstreet and Environs
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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 a continuous red line. Please note that the agglomeration boundary shall include all areas serviced by the sewer network and shall include the wastewater treatment plant. All areas of the agglomeration shall be within the agglomeration boundary. The boundary line on the map should not be impinged on by labels or any other graphic insertions.

Attachment B.1 should contain appropriately scaled hardcopy drawings / maps ($\leq A3$) of the agglomeration served by the waste water works showing the boundary clearly marked in red ink. This drawing / map 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 geo-referenced digital drawing should be provided to the Agency at the following address: gis@edenireland.ie.

Refer to **Attachment B.2** for a drawing of the Millstreet and Environs agglomeration boundary.

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.

Name*:	Irish Water
Address:	Colvill House

	24-26 Talbot Street
	Dublin 1
	01 8925000
CRO Number:	530363
Tel:	01 8925000
e-mail:	WasteWaterLicensingSouthern@water.ie

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

Name*:	Ken Conroy (Regional Wastewater Treatment Specialist)
Address:	Colvill House
	24-26 Talbot Street
	Dublin 1
Tel:	01 8925000
e-mail:	WasteWaterLicensingSouthern@water.ie

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

B.3 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*:	Valerie Hannon (Regional Compliance Specialist)
Address:	Millstreet WwTP
	Drominahilla
	Millstreet
	Co. Cork
Grid ref (6E, 6N)	127399E, 090983N
Level of Treatment	Tertiary
Telephone Number:	01 8925000
e-mail:	WasteWaterComplianceSouthern@water.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 hardcopy drawings / maps ($\leq A3$) of the site boundary and overall site plan, including labelled discharge, monitoring and sampling points.

Refer to **Attachment B.3** for a labelled Site Plan of Millstreet WWTP.

B.4 Description of Associated Waste Water Treatment Plant(s)

Provide a description of the waste water treatment plant(s), type of process units, level of treatment provided and design capacity (p.e. and flow rates) for the areas of the waste water works where discharges occur.

Millstreet Waste Water Treatment Plant upgraded will have a design capacity of 3,220P.E.

The treatment process comprises the following:

- 1 Inlet pumping station
- 2 Screening and grit removal

- 3 Storm holding tank
- 4 Two process streams comprising an Anoxic Tank, Aeration Tank and Settlement Tank for nitrogen and BOD removal
- 5 Ferric dosing for Phosphorus removal
- 6 Sludge treatment including sludge import facility, sludge thickener and sludge storage tank.
- 7 Final effluent pumps and pipeline to outfall at River Finnow, Finnow bridge

Inlet pumping station

Two gravity sewers combine upstream of the Millstreet WWTP and carry influent flow from the network to the inlet foul pump sump. The inlet flows of up to 78 l/s are pumped to receive preliminary treatment (screening and grit removal). Flows in excess of 78l/s go through a bar screen and overflow to the Tanyard Stream via SW007.

Preliminary treatment

Flows entering preliminary treatment will be screened and degrittied in a unit comprising screens, screening compactors operating duty/ standby, conveyors, manual by-pass screen (with facility to manually remove screenings if required), grit auger, and air blower. Removed grit will be washed, compacted, dewatered and discharged into receptacles. There is a splitter box which passes flows of up to 50l/s screened sewage to full treatment and in excess of this to the storm tank.

Anoxic tanks

There are two anoxic tanks, flows split via a splitter chamber, and each tank equipped with a submersible mixer.

Aeration tanks

From the anoxic tanks the mixed liquor is passed through the aeration tanks, fitted with fine bubble air diffusers and supply pipe networks on grid frames.

Phosphorus removal

A chemical phosphate removal plant will be provided by ferric sulphate dosing into the process at the anoxic tanks splitter chamber.

Storm holding tank

Preliminary treated flows in excess of 50 l/s flow by gravity to the Storm holding tank with storage provided for two hours retention. Storm return pumps, operating in a duty/ standby configuration, pump the storm water back to inlet chamber when storm flow rates subside. If storm flows persist, flows will spill via a high level overflow in the storm tank (SW009).

Settlement tanks

The effluent coming from the aeration tanks gravitates to two secondary settlement tanks via a splitter chamber. Sludge settled within the secondary clarifiers is scraped into a central hopper from where sludge is returned/ wasted on a continuous basis.

Sludge treatment

Sludge treatment includes sludge import facility, sludge thickener and sludge storage tank.

Final effluent

The final effluent from the clarifiers flows to the final effluent sump and then will be pumped to the outfall (maximum flow rate of 50 l/s) (SW001).

The maximum flow to the inlet works is 397 l/s. Primary discharge dry weather flow is expected to be in the region of 725 m³/day. Primary discharge maximum flow rates will be 4,320 m³/day (0.050m³/s pump capacity).

Storm Water Overflows

The new storm water overflows will be designed in accordance with DEHLG guidance on Urban Wastewater Treatment Directive (91/271/EEC) Procedures and Criteria in relation to Storm Water Overflows (March 1995). This guidance requires that 'Formula A' flow must be employed as a minimum equating approximately to 6DWF which will ensure that the "first foul flush" is captured in the WWTP and it is only the diluted effluent discharged to the environment.

The existing Storm Water Overflows at the WWTP entrance, where there are two overflows from the same chamber, will be decommissioned.

A new screened overflow will be provided at the inlet pump sump at the WWTP. This will repurpose the original treated effluent outfall at the WWTP to be used as a storm water overflow. A new overflow will be provided from the storm holding tank at the WWTP (SW009). This will discharge to the existing outfall at the WWTP (with SW007).

Pumping stations

Mount Leader pumping station will be upgraded to include a new pump sump with duty/ standby pumps and a new overflow device but retain existing discharge point.

B.5 (i) 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.

Actual Population Equivalent	2,032
Design Population Equivalent	3,220
Data Compiled (Year)	2014
Method of Compilation, e.g., direct measure	Review of registered properties on GeoDirectory, 2011 Census results, and measured water meter data for non-domestic.

Loading values were reviewed based on 2016 Census results with no changes required.

The current organic loading is typically 2,032 p.e, comprising domestic (1,433 PE), commercial and institutional (599 PE) loads but excluding the event centre load (833PE). The proposed new plant will be capable of accommodating the additional organic loading from the events centre. The supporting documentation included in this licence review application assesses the potential impact of 3,220 PE to the receiving water habitat.

A breakdown of the calculations for existing and design loading is presented below.

	Population equivalent (PE)	
	Existing	Proposed
Domestic	1,433	1,559
Non-domestic	599	651
Total day-to-day loading	2,032	2,210
Event Loading	833	1,010

B.5 (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.

No significant developments identified where planning permission has been granted but development has not been completed.

B.5 (iii) FEES

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

Class of waste water discharge	Fee (in €)
Discharges from agglomerations with a population equivalent of: 2,001 – 10,000PE (Licence Review)	€20,000

B.6 Primary Discharge Point

Provide information on the primary discharge point, as defined in the Waste Water Discharge (Authorisation) Regulations as amended, associated with the waste water works.

Type of Discharge	300mm diameter pumped outfall with headwall and non-return flap valve
Unique Point Code	SW001
Location	Finnow Bridge
Grid ref (6E, 6N)	126674, 092040
Source of Emission	Wastewater Treatment Plant – treated effluent
Monitoring Point Location (6E, 6N)	127449, 091040 (tbc) Final effluent pump sump (exact location to be confirmed)
Monitoring Frequency	Monthly
Composite	Yes, at WWTP site

Sampler Provided	
Receiving Water Name	River Finnow
Receiving Water Type	Freshwater
Receiving Water WFD Code	IE_SW_18F030300 at discharge point IE_SW_18F030400 at downstream monitoring point

Attachment B.3 should contain appropriately scaled hardcopy drawings / maps ($\leq A3$) of the primary discharge point, including labelled monitoring and sampling points associated with the discharge point.

Refer to **Attachment B.6.1** for an overview of discharge point locations and **Attachment B.6.2** for a map showing location of the primary discharge point SW001.

B.7 Secondary Discharge Point(s)

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

Not applicable

Type of Discharge	
Unique Point Code	
Location	
Grid ref (6E, 6N)	
Source of Emission	
Monitoring Point Location (6E, 6N)	
Monitoring Frequency	
Composite Sampler Provided	
Receiving Water Name	
Receiving Water Type	
Receiving Water WFD Code	

Attachment B.4 should contain appropriately scaled hardcopy drawings / maps ($\leq A3$) of the secondary discharge point(s), including labelled monitoring and sampling points associated with the discharge point(s).

B.8 Storm Water Overflow Point(s)

Provide information on **all** storm water overflow point(s) associated with the waste water works.

Existing – to be decommissioned.

Unique Point Code	SW002 Tanyard stream at WWTP entrance
Storm Water Device Location (6E, 6N)	127280, 090862
Discharge Location (6E, 6N)	127282, 090864
Does this Storm Water Overflow comply with the criteria as set out in the DoEHLG Procedures and	No

Criteria in Relation to Storm Water Overflows', 1995	
Is this Storm Water Overflow to be decommissioned?	Yes
Decommissioning Date	Quarter 1, 2020

Unique Point Code	SW003 Tanyard stream at WWTP entrance
Storm Water Device Location (6E, 6N)	127280, 090862
Discharge Location (6E, 6N)	127282, 090864
Does this Storm Water Overflow comply with the criteria as set out in the DoEHLG 'Procedures and Criteria in Relation to Storm Water Overflows', 1995	No
Is this Storm Water Overflow to be decommissioned?	Yes
Decommissioning Date	Quarter 1, 2020

Existing

Unique Point Code	SW004 Killarney Road Pump Station
Storm Water Device Location (6E, 6N)	126530, 090305
Discharge Location (6E, 6N)	126345, 090483
Does this Storm Water Overflow comply with the criteria as set out in the DoEHLG 'Procedures and Criteria in Relation to Storm Water Overflows', 1995	Unknown - to be assessed Dual functioning
Is this Storm Water Overflow to be decommissioned?	No
Decommissioning Date	Not applicable

Existing

Unique Point Code	SW005 Mount Leader Pumping Station
Storm Water Device Location (6E, 6N)	126770, 089937
Discharge Location (6E, 6N)	126808, 089966
Does this Storm Water Overflow comply with the criteria as set out in the DoEHLG 'Procedures and Criteria in Relation to Storm Water Overflows', 1995	Yes Dual functioning
Is this Storm Water Overflow to be decommissioned?	No
Decommissioning Date	Not applicable

Existing

Unique Point Code	SW006 Station Road
Storm Water Device Location (6E, 6N)	127117, 090356
Discharge Location (6E, 6N)	127330, 090754

Does this Storm Water Overflow comply with the criteria as set out in the DoEHLG 'Procedures and Criteria in Relation to Storm Water Overflows', 1995	Unknown – To be assessed
Is this Storm Water Overflow to be decommissioned?	No
Decommissioning Date	Not applicable

Existing – to be repurposed

Unique Point Code	SW007 WWTP Inlet pump sump
Storm Water Device Location (6E, 6N)	127425, 090980
Discharge Location (6E, 6N)	127398, 091013
Does this Storm Water Overflow comply with the criteria as set out in the DoEHLG 'Procedures and Criteria in Relation to Storm Water Overflows', 1995	Yes Dual functioning
Is this Storm Water Overflow to be decommissioned?	No
Decommissioning Date	Not applicable

Existing

Unique Point Code	SW008 Adjacent Dairygold
Storm Water Device Location (6E, 6N)	127837, 090340
Discharge Location (6E, 6N)	127826, 090348
Does this Storm Water Overflow comply with the criteria as set out in the DoEHLG 'Procedures and Criteria in Relation to Storm Water Overflows', 1995	Yes
Is this Storm Water Overflow to be decommissioned?	No
Decommissioning Date	Not applicable

New – to be constructed

Unique Point Code	SW009 Storm tank at WWTP
Storm Water Device Location (6E, 6N)	127438, 091005
Discharge Location (6E, 6N)	127398, 091013
Does this Storm Water Overflow comply with the criteria as set out in the DoEHLG 'Procedures and Criteria in Relation to Storm Water Overflows', 1995	Yes
Is this Storm Water Overflow to be decommissioned?	No
Decommissioning Date	Not applicable

Existing

Unique Point Code	SW010
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	Station Road
Storm Water Device Location (6E, 6N)	127121, 090403
Discharge Location (6E, 6N)	127330, 090754
Does this Storm Water Overflow comply with the criteria as set out in the DoEHLG 'Procedures and Criteria in Relation to Storm Water Overflows', 1995	Unknown – To be assessed
Is this Storm Water Overflow to be decommissioned?	No
Decommissioning Date	Not applicable

Attachment B.5 should contain appropriately scaled hardcopy drawings / maps ($\leq A3$) of storm water overflow point(s) associated with the waste water works, including labelled monitoring and sampling points associated with the discharge point(s).

Refer to **Attachment B.8.1** for a map of storm water overflows SW002, SW003, SW006, SW010, SW007 and SW009, **Attachment B.8.2** for a map of storm water overflows SW004 and SW005, **Attachment B.8.3** for SW008.

B.9 Emergency Overflow Point(s)

Provide information on **all** emergency overflow point(s) associated with the waste water works.

Refer to Section B.8 for details of dual functioning Storm Water Overflows / Emergency Overflows

Unique Point Code	Not Applicable
Emergency Overflow Device Location (6E, 6N)	
Discharge Location (6E, 6N)	

Attachment B.6 should contain appropriately scaled hardcopy drawings / maps ($\leq A3$) of emergency overflow point(s) associated with the waste water works, including labelled monitoring and sampling points associated with the discharge point(s).

B.10 Leachate

Leachate Accepted at the plant	Yes	No
		✓
Quantity of Leachate accepted (m³/annum)	Not Applicable	

B.11 Industrial, Commercial and Trade Inputs

Applicants should provide details of any significant industrial inputs into the waste water treatment works.

Industrial Inputs	Type	Quantity (m³/annum)
Not Applicable		

B.12 Abstractions

Applicants should submit the following information for each abstraction point (including drinking water) which potentially impacts on, or is potentially impacted by the waste water treatment works. 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.

Abstraction Code	Abstraction Volume (m ³ /day)	Distance upstream/downstream	Easting (6E-digit GPS Irish National Grid Reference)	Northing (6E-digit GPS Irish National Grid Reference)
Not Applicable				

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

Attachment B.7 should contain any supporting information.

B.13 Planning Authority and/or Public Authority

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

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

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

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

Local Authority Planning File Reference N^o:	17/04490
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Attachment B.8a should contain **the most recent** planning permission, including a copy of **all** conditions, a copy of the planning inspector's report and where an EIAR was required, copies of any such EIAR and any certification associated with the EIAR, should also be enclosed. Where planning permission is not required for the development, provide reasons, relevant correspondence, etc.

Refer to **Attachment B.13** for details of the Planning Permission and Inspector's Report.

B.14 Notices and Advertisements

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

Attachment B.9 should contain a copy of the site notice and an appropriately scaled drawing ($\leq A3$) showing its location. **The original application must include the original page of the**

newspaper in which the advertisement was placed. The relevant page of the newspaper containing the advertisement should be included with the original and one (1) copy of the application.

Refer to **Attachment B.14.1** for the Site Notice, **Attachment B.14.2** for the Site notice location and **Attachment B.14.3** for the newspaper advertisement.

B.15 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 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.

Capital investment has been committed to the following improvement programme for Millstreet:

- It is planned to construct upgrades to the existing WwTP on the site 0.7km north of the town centre, which will serve the town of Millstreet.
- The WWTP will comply with the Urban Waste Water Treatment Regulations Standards (SI No. 254 of 2001, as amended)
- The upgraded WWTP will have a final effluent pumping station to discharge treated effluent to a new discharge point at the River Finnow.

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.16 Significant Correspondence

Provide a summary of any correspondence resulting from a Section 63 notice or a compliance correspondence issued by the Agency in relation to the waste water works under the Environmental Protection Agency Act 1992 as amended, or the Waste Water Discharge (Authorisation) Regulations 2007 as amended.

There have been no Section 63 notices issued by the Agency in relation to the wastewater works under the Environmental Protection Agency Acts, 1992 to 2011. Open Compliance Investigation requires update on progress with Specified Improvement Programme.

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

B.17 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 as amended.

Not Applicable

Attachment B.12 should contain the most recent licence issued under the Foreshore Act 1933 as amended, including a copy of **all** conditions attached to the licence and any monitoring returns for the previous 12-month period, if applicable.

SECTION C: DISCHARGES & MONITORING

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.

The emissions from the agglomeration are as set out in the table below.

Discharge point code	Type	Source	Receiving WB name	6E digit Irish National Grid Ref	6N digit Irish National Grid Ref	Rate / Period of Discharge
SW001	Primary	WWTP final effluent	Finnow River	126674	092040	Up to 50 l/s Intermittent (pumped)
SW009	SWO	WWTP Storm holding tank	Tanyard stream	127398	091013	Up to 28 l/s Intermittent
SW007	SWO & EO	WWTP Inlet pump sump	Tanyard stream	127398	091013	Up to 319 l/s Intermittent
SW004	SWO & EO	Killarney Road pumping station	Finnow river	126345	090483	Unknown Intermittent
SW005	SWO & EO	Mountleader Bridge pumping station	Finnow River	126808	089966	Unknown Intermittent
SW006	SWO	Network at Station Road, upstream of WWTP	Drain to Tanyard stream	127330	090754	Unknown Intermittent
SW010	SWO	Network at Station Road, upstream of WWTP	Drain to Tanyard stream	127330	090754	Unknown Intermittent
SW008	SWO	Network, adjacent to Dairygold	Tanyard stream	127826	090348	Unknown Intermittent
SW002	SWO	WWTP entrance (to be decommissioned)	Tanyard Stream	127282	090864	Zero none
SW003	SWO	WWTP entrance (to be decommissioned)	Tanyard Stream	127282	090864	Zero none

- Undertake and provide details of a risk based assessment of the discharge in order to identify the relevant priority substances for monitoring. This assessment shall be undertaken in accordance with "Guidance on the Screening for Priority Substances for Waste Water Discharge Licences" issued by the Agency. Provide details of the sources of any priority substances detected during the risk based assessment of discharges that would be likely to give rise to exceedances of the

relevant standards set in the European Communities Environmental Objectives (Surface Waters) Regulations 2009 as amended. Provide information on measures that are necessary to reduce or eliminate priority substances in the discharge(s).

Refer to Attachment C.1.1. The assessment was desk based, using influent analyses for metals carried out in 2014 and 2015, which confirmed the influent was domestic in nature. The emissions of specific organic compounds and metals (priority substances) were estimated for the discharge using the EPA's urban WWTP calculation tool for PRTR reporting. No parameters were identified as potentially being higher than the required EQS following dilution, therefore no impact on the receiving waters is anticipated.

- Details of all discharges of waste water from the agglomeration should be supplied. Tables C.1(a) & (b), should be completed for the primary discharge point from the agglomeration and Tables C.2(a) & (b) should be completed for **each** secondary discharge point, where relevant. Individual Tables must be completed for each discharge point.

Tables C.1(a) & (b) have been completed in Annex of this application.

Note that data in Table C.1(b) relate to the discharge from the current WWTP to the Tanyard Stream, pre-upgrade. Values are for the 2018 monitoring period.

There are no secondary discharges from the agglomeration.

- Describe the existing or proposed measures, including emergency procedures, to prevent unintended waste water discharges and to minimise the impact on the environment of such discharges.

The upgraded WWTP will include monitoring equipment that will allow relevant levels and flow rates in the treatment plant to be monitored. The plant operator can monitor this information remotely. The WWTP will also include alarms in the event of equipment malfunction. These alarms will notify the plant operator.

Key equipment is provided in a duty/standby arrangement with automatic switchover.

A facility is provided to allow the WWTP to be connected to a portable generator to allow continued operation of the treatment plant in the event of interruption to the power supply.

An Emergency Response Plan will be prepared by the Contractor for their operation of the WWTP.

- Regulation 16(1)(h) of the Waste Water Discharge (Authorisation) Regulations 2007 as amended, requires all applicants to provide the sampling data pertaining to the discharge based on the samples taken in the 12 months preceding the making of the application.

Refer to **Attachment C.1.3** for primary discharge monitoring data and **Attachment C.1.2** for influent data. Data is provided for the period Jan

2018 to July 2019 for the discharge from the current WWTP to the Tanyard Stream.

- Attach associated monitoring data for the receiving water for the 12 months preceding the making of the application. This data should be provided for the primary discharge point and each of the secondary discharge points, if applicable.

Refer to **Attachment C.1.4** for ambient monitoring data.

The proposed upstream (aSW001u) and downstream (aSW001d) ambient monitoring locations for the proposed new Primary Discharge point (SW001) is detailed on Appendix B.6.2.

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

An automatic sampling unit will be provided on the treated effluent sump or line to allow for the collection of flow proportional composite samples. Composite samples will be collected and analysed in accordance with licensing requirements.

- For waste water treatment plants with coastal discharges, provide evidence that the end of the discharge pipe is below the mean spring tide low water line.

Not Applicable

Attachment C.1 should contain all supporting information.

Refer to **Attachment C.1.2** for WWTP influent data, **Attachment C.1.3** for effluent sampling data, **Attachment C.1.4** for receiving water monitoring data and **Attachment C.1.1** for priority substances assessment.

SECTION D: 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 applicable, information on the state of the existing environment should be addressed in the EIAR. **In such cases, it will suffice for the purposes of this section to provide adequate cross-references to the relevant sections in the EIAR.** If there is no EIAR associated with the development, information on the existing environment should be provided here.

D.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 and assessment provided below for emissions to surface water.

- 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.

Proposed Primary Discharge to Finnow River

The Finnow River upstream of the Finnow Bridge (FINNOW (BLACKWATER)_030) is not assigned a Water Framework Directive (WFD) status. Downstream of the bridge (river section FINNOW (BLACKWATER)_040) the Finnow is assigned a Good status. The Tanyard stream (FINNOW (BLACKWATER)_040) is included in this stretch of the Finnow and is equally assigned Good WFD Status under the most recent monitoring cycle (2010-2015). The status of the rivers is informed by monitoring undertaken by Cork County Council (on behalf of the EPA) at Wallis's Br (RS18F030400).

The potential for effects on the water quality of the River Finnow from the future design discharge from the Millstreet WWTP was assessed using waste assimilative capacity (WAC) calculations. The calculation is based on the following data:

- The 95%ile flow (low flow) in Finnow River is 0.234m³/sec (based on EPA Hydrotool).
- Dry weather flow from WWTP of 0.008m³/s during low flow periods in the receiving water, based on 225 l / PE/ day
- The emission limit values in Schedule A.1 of the current licence.

- Background concentration water quality in the River Finnow (based on 2012 – 2019 monitoring data at Finnow Br)
- Environmental Quality Standards (EQS) for Good status water bodies.

Assimilative Capacity Calculation

		BOD	Ortho-P	Ammonia
		mg O ₂ /l	mg P/l	mg N/l
Background concentration		0.9667	0.0156	0.0254
Receiving Water 95%ile flow	m ³ /s	0.234	0.234	0.234
Discharge Concentration	mg/l	25	0.5	1
Resultant Concentration in River	mg/l	1.09	0.02	0.04
Max Concentration in River	mg/l	2.6	0.075	0.14

The resultant BOD in the River Finnow will be 1.09mg/l, which is less than the limit for 'Good' status of 2.6mg/l. The resultant Ortho-P in the River Finnow will be 0.02mg/l, which is less than the limit for 'Good' status of 0.075mg/l. The resultant Ammonia in the River Finnow will be 0.04mg/l, which is less than the limit for 'Good' status of 0.14mg/l.

The WAC calculation demonstrates that the proposed discharge will not impact on the River Finnow maintaining 'Good' status. Due to the high dilution in the receiving water and tertiary treatment at the plant, the predicted concentrations in the Finnow River in fact would not breach the EQS for 'High' status.

The DWF used in WAC calculations above differs from DWF in the NIS which is based on a higher value to reflect infiltration into the network. WAC calculations in the NIS also predict no impact on water body status from the proposed discharge. Rehabilitation works on the network are planned by Irish Water and are expected to reduce infiltration to standard levels. The 95%ile flow for the River Finnow is slightly higher in the NIS as it was taken from the EPA Inspector's report whereas the figure above is based on the EPA hydrotool.

The existing Millstreet WWTP discharges into the Tanyard Stream. The upgraded treatment plant will discharge to the Finnow River. An improvement in water quality in the Tanyard stream is expected as a result of the change in discharge location. The existing Millstreet WWTP comprises an extended aeration system followed by settlement. The upgraded treatment plant will provide tertiary treatment with nutrient reduction. There will be an associated improvement in the discharge quality.

The new outfall will be located at Finnow Bridge, which is approximately 2km upstream of the confluence with the Blackwater River. As such there will be an increased volume of water in which to assimilate the discharge in advance of the confluence with the main channel of the Blackwater River.

The existing storm water overflow from the Millstreet WWTP to the Tanyard Stream is unscreened and there is no stormwater retention facility at the WWTP. The new storm water overflow will be screened and storm water storage provided. An improvement in water quality in the Tanyard Stream is expected as a result of the upgrade works.

- Where a discharge is being made to a small stream, provide evidence that there is a background flow in the stream all year round.

Not applicable

- Provide details and evaluate any direct or indirect discharges to groundwater that may be associated with the waste water treatment plant in accordance with the EPA Guidance document '*Guidance on the Authorisation of Direct Discharges to Groundwater*' (2014) and the Agency published '*Guidance on the Authorisation of Discharges to Groundwater*' (2011).

Not Applicable.

- Describe the existing environment in terms of water quality with particular reference to environmental quality standards or other legislative standards. Give details of any designation under any Council Directive or Regulations that apply in relation to the receiving water.

River Finnow – Primary Discharge Location

The River Waterbody WFD Status 2010-2015 for the River Finnow at the discharge point (immediately upstream of Finnow Bridge) is unassigned. From Finnow Bridge downstream to Wallis Bridge, the WFD status is identified as 'Good'.

The Finnow River is not designated as Sensitive in accordance with the Urban Waste Water Treatment (UWWT) Directive 91/271/EEC or Urban Waste Water Treatment and S.I. 254 / 2001, S.I. 440/2004 and S.I. 48/2010.

The Finnow River is not designated as a Freshwater Pearl Mussel habitat in the Freshwater Pearl Mussel (Amendment) Regulations (S.I. 355 / 2018).

River Blackwater – downstream of Primary Discharge Location

The River Waterbody WFD Status 2010-2015 for the River Blackwater at the confluence with the River Finnow is identified as 'High'.

The River Blackwater is not designated as Sensitive in accordance with the Urban Waste Water Treatment (UWWT) Directive 91/271/EEC or Urban Waste Water Treatment and S.I. 254 / 2001, S.I. 440/2004 and S.I. 48/2010.

The River Blackwater is not designated as a Freshwater Pearl Mussel habitat in the Freshwater Pearl Mussel (Amendment) Regulations (S.I. 355 / 2018). It is of note that the Blackwater Munster was originally included in the 2009 Regulations, however the conservation objectives for the Blackwater Special Area of Conservation were amended to

remove the pearl mussel as a qualifying interest in the main channel of the river. As such the 2018 Regulations remove the Munster Blackwater main channel from the list of named habitats to which the Regulations apply.

Tanyard Stream – SWO from WWTP

The waterbody WFD Status 2010-2015 for the Tanyard Stream at the discharge point (at WWTP) is identified as 'Good'.

The Tanyard Stream is not designated as Sensitive in accordance with the Urban Waste Water Treatment (UWWT) Directive 91/271/EEC or Urban Waste Water Treatment and S.I. 254 / 2001, S.I. 440/2004 and S.I. 48/2010.

The Tanyard Stream is not designated as a Freshwater Pearl Mussel habitat in the Freshwater Pearl Mussel (Amendment) Regulations (S.I. 355 / 2018).

Further details of the existing environment in terms of water quality is included in the Natura Impact Statement included as **Attachment D.2.1.**

- Provide information demonstrating 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;
 - 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,
 - Marine Strategy Framework Directive 2008/56/EC, and
 - European Communities Environmental Objectives (Surface Waters) Regulations 2009 as amended.

The planned upgrade works will ensure that the emissions from the agglomeration will comply with, and not result in the contravention of the above directives. Further details on the planned upgrade works are detailed in Section B.4 of this application.

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

Not applicable

- 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 D.1.

No modelling of the discharges has been undertaken. WAC calculations were sufficient to demonstrate assimilative capacity in the receiving environment and to propose appropriate emission limit values.

Waste Assimilative Capacity calculations have been attached in **Attachment D.1.2**

Refer to **Attachment D.1.1** for EPA Hydrotool for the River Finnow, **Attachment D.1.2** for Waste Assimilative Capacity calculations.

D.2. Appropriate Assessment

- Where applicable, provide a copy of any screening for Appropriate Assessment report and Natura Impact Statement (NIS) that was prepared for consideration by any planning/public authority as defined in Regulation 2(1) of the European Communities (Birds and Natural Habitats) Regulations 2011 as amended, in relation to the waste water works. Where a determination that an Appropriate Assessment is required has been made by any planning/public authority in relation to the waste water works, a copy of that determination and any screening report and Natura Impact Statement (NIS), and any supplementary information furnished in relation to any such report or statement, which has been provided to the planning/public authority for the purposes of the Appropriate Assessment shall be included.

The receiving water, the River Finnow, is part of the Blackwater River SAC.

Proposals to upgrade the Millstreet WWTP were subjected to screening for appropriate assessment in June 2015. The screening assessment determined Potential Significant effects on the Blackwater River SAC (site code: 002170).

A Natura Impact Statement (NIS) was prepared in November 2016 for the WWTP and submitted to the planning authority.

Negative operation stage impacts were determined as unlikely due to the plant design requirements to achieve a high level of effluent treatment in advance of discharge.

The NIS concluded that the assessment of the project alone and in combination with other projects and plans, including the implementation of mitigation measures, clearly demonstrates that no adverse effects on site integrity will arise to the Blackwater River SAC in view of its conservation objectives.

A copy of this NIS is included in **Attachment D.2.1**

- Undertake a screening for Appropriate Assessment and submit a copy of the screening report in Attachment D.2.

The Appropriate Assessment screening was carried out in July 2015 for the original outfall site at the confluence of the River Finnow and the Tanyard Stream. Cork County Council as competent authority for the planning application decided an NIS was required and this was

completed to consider the change of outfall location to the Finnow bridge. A revised AA screening report was not prepared.

Refer to the NIS included in Attachment D.2.1 for a summary of the Appropriate Assessment Screening.

- Complete Table D.1 providing details of all European Sites considered as part of the screening for appropriate assessment.

Table D.1 has been completed with European sites considered as part of the appropriate assessment.

- Based on the information provided above, indicate whether the discharge(s), individually or in combination with other plans or projects, is likely to have a significant effect on a European Site(s), in view of best scientific knowledge and the conservation objectives of the site(s). Provide reasons for this determination.

Likely significant effects were determined and a Natura Impact Statement prepared

- Where it cannot be excluded, on the basis of objective scientific information, following screening for Appropriate Assessment, that the discharge(s), either individually or in combination with other plans or projects, will have a significant effect on a European Site, provide a Natura Impact Statement (in Attachment D.2), as defined in Regulation 2(1) of the European Communities (Birds and Natural Habitats) Regulations 2011 as amended.

Refer to the NIS included in Attachment D.2.1

The discharges from the upgraded Millstreet WWTP will have no effects on site integrity of the Blackwater River SAC. The upgrade of Millstreet WWTP will result in improvements that will benefit the aquatic qualifying interests of the Blackwater River (Cork/Waterford) SAC 002170 in the long term.

Attachment D.2 should contain an Appropriate Assessment screening report and where applicable a Natura Impact Statement.

Refer to **Attachment D.2.1** for the Natura Impact Statement for Millstreet WWTP Upgrade.

D.3. Programme of improvements

- Provide details on a programme of improvements to ensure that discharges from the agglomeration will not result in significant environmental pollution and details to ensure that all emissions from the agglomeration will comply with, or will not result in the contravention of any national or European legislation.

To ensure that discharges from the agglomeration will not result in significant environmental pollution, the following are proposed:

- Implementation of an appropriate performance management system for the plant;
- Implementation of the measures listed in the NIS (if applicable);

- A comprehensive monitoring and sampling programme will be undertaken by the contractor in accordance with the relevant standards and frequencies as set out by Irish Water and to comply with licence requirements.

See Section B.4 for further details on programme of improvements (i.e. current upgrade works details). It is anticipated that the upgrade works will be completed by Quarter 1 2020, subject to the work being progressed as expected.

Attachment D.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.

SECTION E: DECLARATION**Declaration**

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

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

I give consent to the EPA to copy this application for its own use and to make it available for inspection and copying by the public, both in the form of paper files available for inspection at EPA and Irish Water 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 the Applicant or any person acting on the Applicant's behalf.



Signed by : _____
(on behalf of the organisation)

Date : 13/09/2019

Print name: Sean Laffey

Position in organisation: Head of Asset Management

ANNEX 1: TABLES/ATTACHMENTS

Table C.1(a): Emissions to Surface/Ground Water – Primary Discharge Point

Discharge Point Code	SW001
Normal Volume Emitted/day (m ³ /day)	1,210 m ³ /day
Maximum Volume Emitted/day (m ³ /day)	4,320 m ³ /day
Period of Emission (avg)	24 hours per day

Table C.1(b): Emissions to Surface/Ground Water – Characteristics of the Emission - Primary Discharge Point

Data in the table below is based on the discharge from the current WWTP to the Tanyard Stream, values from 2018 monitoring results.

Substance	As Discharged		
	Unit of Measurement	Sampling Method	Max Daily Average*
pH	pH	Composite Sampler	7.9
Temperature	°C	Not measured	
Suspended Solids	mg/l	Composite Sampler	56 mg/l
Total Ammonia (as N)	mg/l	Composite Sampler	8.2 mg/l
Carbonaceous Biochemical Oxygen Demand	mg/l	Composite Sampler	4.8 mg/l
Chemical Oxygen Demand - Cr	mg/l	Composite Sampler	26 mg/l
Total Nitrogen (as N)	mg/l	Not measured	
Total Phosphorus (as P)	mg/l	Not measured	
Orthophosphate (as P) - Unspecified	mg/l	Composite Sampler	2.98 mg/l

* Max daily average refers to the maximum concentration of the relevant substance recorded from composite sample results during the monitoring period.

Table C.2(a): Emissions to Surface/Ground Water – Secondary Discharge Point
 (1 table per discharge point)

Discharge Point Code	Not Applicable
Normal Volume Emitted/day (m ³ /day)	
Maximum Volume Emitted/day (m ³ /day)	
Period of Emission (avg)	

Table C.2(b): Emissions to Surface/Ground Water – Characteristics of the Emission - Secondary Discharge Point
 (1 table per discharge point)

Substance	As Discharged		
	Unit of Measurement	Sampling Method	Max Daily Average*
pH	pH		
Temperature	°C		
Suspended Solids	mg/l		
Total Ammonia (as N)	mg/l		
Carbonaceous Biochemical Oxygen Demand	mg/l		
Chemical Oxygen Demand - Cr	mg/l		
Total Nitrogen (as N)	mg/l		
Total Phosphorus (as P)	mg/l		
Orthophosphate (as P) - Unspecified	mg/l		

* Max daily average refers to the maximum concentration of the relevant substance recorded from composite sample results during the monitoring period.

Table D.1: List of European Sites assessed, their associated qualifying interests and conservation objectives.

	European Site Name & Site Code	Distance/ Direction of European Site from discharge(s) (e.g. X km east downstream of the discharge(s) on the X River.)	Qualifying interests List all habitats and species listed in the Conservation Objectives document on the NPWS website. Denote priority habitats with an *. For species list the English Name & <i>Latin Name</i> .	Conservation objectives Cite the most recent Conservation Objectives document on the NPWS website for the European Site.
1	SAC : Blackwater River (Cork/Waterford) Code: 002170	Discharging into SAC	<p>Estuaries [1130]</p> <p>Mudflats and sandflats not covered by seawater at low tide [1140]</p> <p>Perennial vegetation of stony banks [1220]</p> <p><i>Salicornia</i> and other annuals colonising mud and sand [1310]</p> <p>Atlantic salt meadows (<i>Glaucopuccinellietalia maritimae</i>) [1330]</p> <p>Mediterranean salt meadows (<i>Juncetalia maritimi</i>) [1410]</p> <p>Water courses of plain to montane levels with the <i>Ranunculion fluitantis</i> and <i>Callitriche-Batrachion</i> vegetation [3260]</p> <p>Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles [91A0]</p> <p>*Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i>, <i>Alnion incanae</i>, <i>Salicion albae</i>) [91E0]</p> <p>*<i>Taxus baccata</i> woods of the British Isles</p> <p>Freshwater Pearl Mussel (<i>Margaritifera</i></p>	NPWS (2012) Conservation Objectives: Blackwater River (Cork/Waterford) SAC 002170. Version 1.0. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht

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			<p><i>margaritifera</i>) [1029]</p> <p>White-clawed Crayfish <i>Austropotamobius pallipes</i> [1092]</p> <p>Sea Lamprey (<i>Petromyzon marinus</i>) [1095]</p> <p>Brook Lamprey (<i>Lampetra planeri</i>) [1096]</p> <p>River Lamprey (<i>Lampetra fluviatilis</i>) [1099]</p> <p>Twaiite Shad (<i>Alosa fallax fallax</i>) [1103]</p> <p>Salmon (<i>Salmo salar</i>) [1106]</p> <p>Otter (<i>Lutra lutra</i>) [1355]</p> <p>Killarney Fern (<i>Trichomanes speciosum</i>) [1421]</p>	
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ANNEX 2: Licence Application Checklist

Section	Attachment Number	Document	Attached by Applicant ✓
Non-Technical Summary	A.1	Non-technical summary Location Map	✓
General	B.2	Agglomeration boundary map Agglomeration boundary	✓
	B.3	Site boundary and overall site plan Site plan	✓
	B.6	Primary discharge point location map Discharge points overview Primary discharge location	✓
	B.7	Secondary discharge point location map(s) Not applicable	Not Applicable
	B.8	Storm Water Overflow location map(s) Storm water overflow locations x 3 maps	✓
	B.9	Emergency Overflow location map(s) Not applicable	Not Applicable
	B.12	Supporting information on Abstractions Not applicable	Not Applicable
	B.13	Most recent planning permission, including all conditions, the planning inspectors report and an EIAR where required. Planning permission and inspectors report	✓
	B.14	A copy of the site notice and newspaper notice Site notice location Site notice Newspaper advertisement	✓
	B.15	Most recent Capital Investment Programme, including a copy of any approved funding Not applicable	Not Applicable
	B.16	Section 63 Notices/ compliance correspondence Not applicable	Not Applicable
B.17	Most recent licence issued under the Foreshore Act 1933 as amended Not applicable	Not Applicable	
Discharges & Monitoring	C.1	Supporting information on Discharges and Monitoring Priority substances assessment	✓

		Influent data Primary discharge monitoring data Receiving water ambient monitoring data	
Existing Environment & Impact of the Discharge(s)	D.1	All supporting information on the assessment of the impact on the receiving waters Flow data for receiving waterbody Waste assimilative capacity calculations	✓
	D.2	Appropriate Assessment screening report and where applicable a Natura Impact Statement Natura Impact Statement for Millstreet WWTP Upgrade	✓
	D.3	Most recent Programme of Improvements Not applicable	Not Applicable

ANNEX 3: Compliance with Waste Water Discharge (Authorisation) Regulations 2007 as amended

- Regulation 16 of the Waste Water Discharge (Authorisation) Regulations 2007 as amended sets out the information which must, in all cases, accompany a discharge licence application. Applicants should ensure that the application fully complies with the legal requirements of Regulation 16 of the 2007 Regulations as amended.
- Regulation 16(3) states that an application for a licence shall be accompanied by such fee as is appropriate having regard to the provisions of Regulations 38 and 39.

Has the appropriate fee been paid?	Yes/No	Amount

- Regulation 16(4) states that an original application shall be accompanied by 2 copies of it and of all accompanying documents and particulars as required under Regulation 16(3) in hardcopy or in an electronic or other format as specified by the Agency.

The application shall include a signed original, 1 hardcopy of the application and 2 CD versions of the application (PDF files).

Has this documentation been provided?	Yes	No

- Regulation 17 states that where a treatment plant associated with the relevant waste water works is or has been subject to the European Communities (Environmental Impact Assessment) Regulations 1989 to 2001, in addition to compliance with the requirements of Regulation 16, an application in respect of the relevant discharge shall be accompanied by a copy of an environmental impact statement and approval in accordance with the Act of 2000 in respect of the said development and may be submitted in an electronic or other format specified by the Agency.

Where applicable, the application shall be accompanied by 2 hardcopies of the EIAR and 2 CD versions of the EIAR (PDF files).

Has this documentation been provided where applicable?	Yes	No