

Yvonne English
 Environmental Licensing Programme
 Office of Environmental Sustainability
 Environmental Protection Agency
 PO Box 3000
 Johnstown Castle Estate
 Wexford

Uisce Éireann
 Bosca OP 6000
 Baile Átha Cliath 1
 Éire

Irish Water
 PO Box 6000
 Dublin 1
 Ireland

T: +353 1 89 25000
F: +353 1 89 25001
www.water.ie

22nd January 2018

IW-ER-LT0416

Dear Ms English,

Re: Courtmacsherry Timoleague, Waste Water Discharge Licence Reg. No. D0294-02

In response to the Regulation 18(3)(b)-1 request for information notice dated 12th January 2018, please see below for relevant information.

Provide an update of the situation at the Courtmacsherry Timoleague agglomeration. Provide a timeframe for the construction and the operation of the proposed new waste water treatment plant for the agglomeration.

Appointment of the contract to upgrade the Courtmacsherry Timoleague agglomeration and construct a new Waste Water Treatment Plant is scheduled to be finalised by the end of March 2018. Therefore, it is estimated that the new plant will be constructed and operational by 31/12/2019.

Provide dates for the decommissioning of all the secondary discharge points within the agglomeration.

In line with the estimated completion date of the new plant, all secondary discharges within the Courtmacsherry Timoleague agglomeration will be decommissioned by 31/12/2019. See table below detailing all secondary discharges which shall be decommissioned by this date.

Code	Type	EASTING	NORTHING	Location
SW6	Secondary	150106	042711	From St. Joseph's septic tank into Argideen Estuary
SW7	Secondary	147200	043523	Abbey Bridge, Timoleague
SW8	Secondary	147132	043496	School Road, Timoleague
SW9	Secondary	147141	043507	West of Abbey Bridge, Timoleague
SW10	Secondary	147209	043702	Timoleague Abbey
SW11	Secondary	147176	043789	Church Bridge, Timoleague

The Non-Technical Summary, submitted to the agency on 07/09/2016, has been revised and is included in Appendix 1 of this document.

Further to the above, Irish Water also wishes to advise the Agency of changes to the Waste Water Discharge License Application Sections B, E, F and G. The amendments to the relevant sections are relating to the revised completion date for the agglomeration upgrade works and construction of the new Waste Water Treatment Plant. Text amendments have been denoted by *italics*.

Section B.10 Capital Investment Programme

The upgraded works are planned to be completed by end of 2019.

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

Sampling facilities and continuous flow meters will be provided when new Waste Water Treatment Plant is in place with likely timeframe for completion of works to be end 2019.

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

A new WwTP providing secondary treatment for the Courtmacsherry Timoleague agglomeration is planned for completion in 2019 as required by the mitigation measures.

G.3 Impact Mitigation

The upgrade works are at tender stage and are planned to be completed by end 2019.

Please find enclosed the following items;

- Appendix 1 – Section A: Non-Technical Summary

Irish Water has had regard to *Regulation 18(3)(b) of the Waste Water Discharge (Authorisation) Regulations 2007, as amended* in compiling this response to the Request for Further Information.

Best Regards,



Niall Horgan
Wastewater Compliance Lead

Appendix 1. Section A: Non-Technical Summary

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Waste Water Works and Activities Carried Out Therein

Existing Situation

The existing wastewater treatment plant in Courtmacsherry consists of a septic tank located in the village centre near Courtmacsherry Pier. The septic tank discharges into the Argideen Estuary. The treatment system was constructed in the mid-eighties and is inadequate to meet the current needs of the village. The design parameters for the septic tank were 500 p.e. and 5.5 hours retention for 3 times dry weather flow (DWF) with retention time of 12 hours for average flows.

The Courtmacsherry sewer is a combined system and a storm overflow facility exists at the entrance manhole to the septic tank. This screened overflow bypasses the septic tank and discharges through the same outfall. There is also a secondary discharge from a septic tank at St. Joseph's Estate on the west side of Courtmacsherry village, into the estuary.

At present there is no waste water treatment in Timoleague. Wastewater from the village discharges directly to the Argideen Estuary at five locations (secondary discharges) detailed below. The sewer system in Timoleague is mainly drained via a combined sewerage system. A new separate foul sewer was constructed recently in Chapel Hill.

All existing discharges are listed below.

Proposed Sewerage Scheme Upgrade

The joint upgrading of Courtmacsherry and Timoleague Sewerage Schemes is scheduled for completion by *end of 2019*. It is proposed to construct a new waste water treatment plant to cater for a p.e. load of 2,500 which will discharge via the existing septic tank discharge outfall location in Courtmacsherry (SW1). The waste water treatment plant will be constructed as part of a DBO bundle of schemes. The chosen contractor will then design and build over 1 year and operate the plant for seven years.

The existing septic tank in Courtmacsherry shall be converted into a new pumping station, referred to as Harbour PS, and will deliver Formula A flows to the WwTP, with a built in stormwater overflow (SW2, discharge at same location as new & existing primary discharge) ensuring that spills do not exceed 7 times in 1 year.

The current septic tank at St Joseph's estate will be decommissioned and the wastewater directed to the Harbour Court Pumping Station. A new Stormwater overflow will be built at this P.S. (SW4).

The existing Lodge pumping station (PS) adjacent to the Courtmacsherry Hotel will be upgraded to accommodate future development on the eastern side of the village. A new storm overflow (SW3) will be built here with spill incidences to the Bay limited to a maximum of seven in number per annum.

A new collector sewer will be constructed in Timoleague to collect and transfer flows from the Timoleague catchment to a new Timoleague Pumping Station and to enable removal of 5 no. existing raw sewer outfalls, which currently spill to the Argideen Estuary, from the existing wastewater

collection network. A new stormwater overflow will be built into this Timoleague Pumping Station (SW5).

Sources of Emissions from the Waste Water Works

The most significant loading in terms of quantity is the domestic population generated load which varies significantly due to local tourism. The current peak summer loading population equivalent (p.e.) for the combined agglomerations of Timoleague and Courtmacsherry is 1,490 p.e. including the non-domestic contributions. The projected year 2022 peak summer loading for the combined agglomeration of Timoleague and Courtmacsherry is 1,557 p.e., based on a growth rate of 0.644%¹ per annum for six years, i.e. the agglomeration population equivalent is in the range 1,001-2,000 p.e..

Identification of significant effects of the emissions on the environment

The effluent discharges from the waste water works flow directly into the Courtmacsherry Estuary SAC and the Courtmacsherry Bay SPA. The current Transitional Waterbody WFD Status 2010-2012 of the Estuary is Poor and the wastewater works discharges are having a negative impact on water quality.

The new WwTP to cater for effluent discharges for Courtmacsherry and Timoleague will be designed to operate in compliance with existing legislative and regulatory standards. This will improve the water quality of the Argideen Estuary/Courtmacsherry Harbour and help to protect the Courtmacsherry Estuary SAC and Courtmacsherry Bay SPA.

Code	Type	EASTING	NORTHING	Location
SW1*	Existing & Primary Discharge Pt. (existing & proposed)	150732	042818	Into Argideen Estuary, 280m w of Courtmacsherry Hbr
SW2*	Existing & Proposed SWO	150732	042818	From new Harbour P.S (old Harbour Septic tank)
SW3 & EO1	Proposed SWO & existing Emergency Overflow	151498	042565	From Lodge P.S. near Courtmacsherry Hotel
SW4	Proposed SWO	150038	042674	Harbour Court P.S.
SW5	Proposed SWO	147090	043460	From new Timoleague P.S.
SW6	Secondary Discharge Pt.	150106	042711	From St. Joseph's septic tank into Argideen Estuary
SW7	Secondary Discharge Pt	147200	043523	Abbey Bridge, Timoleague

¹ Based on ESRI County Growth Rate Estimates

SW8	Secondary Discharge Pt	147132	043496	School Road, Timoleague
SW9	Secondary Discharge Pt	147141	043507	West of Abbey Bridge, Timoleague
SW10	Secondary Discharge Pt	147209	043702	Timoleague Abbey.
SW11	Secondary Discharge Pt	147176	043789	Church Bridge, Timoleague

*SW1 and SW2 share the same outfall location. **SWO** = Storm Water Overflow

All Secondary discharges and the existing Emergency Overflow will be decommissioned by 31/12/2019 in line with the completion of the agglomeration upgrade works and construction of the new WwTP.

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

The new WTP will provide secondary treatment and be designed to comply with the Urban Wastewater Treatment Regulations for the existing and foreseeable future p.e..

As part of the major upgrade, the untreated discharges from Courtmacsherry and Timoleague into the Argideen Estuary will be discontinued. Stormwater overflows will be compliant with the DoEHLG *Procedures and Criteria in Relation to Storm Water Overflows*. The wastewater network will also be rehabilitated resulting in better performance of the collection system. Detailed design is not available yet.

Measures planned to comply with the general principle of the basic obligations of the operator

Under the DBO contract for the new WwTP, a Performance Management System will be required. The contractor will be required to comply with Irish Water Standards including procedures for dealing with plant operation, and in particular for dealing with emergencies or failure to meet treated effluent standards. Failure to meet the specified treated effluent standards may result in final penalties to the operating contractor. As a result, the risk of environmental pollution from the treatment plant should be reduced.

Measures planned to monitor emissions into the environment

The DBO Contractor/Irish Water will monitor the wastewater treatment plant assets and operations, which includes undertaking sampling, safe access, monitoring and analysis of the wastewater and sludge.

Sampling and monitoring points for the Primary Discharge are listed below and illustrated in Attachments B2 (i) and (ii).

Ambient monitoring is not carried out by Irish Water. There are nine operational EPA monitoring stations within Courtmacsherry Estuary which provide ambient data as shown in Attachment E.2(ii). Two of these are listed below. It is proposed to continue ambient monitoring at the upstream locations on the River Argideen (Inchy Bridge) and River Spital (Spital Bridge).

Historic monitoring locations are illustrated in Attachments E.2(i).

Monitoring Locations

Type of Point	Location	Easting 6E	Northing 6N
Primary Discharge Influent (ISW1)	Lodge Pumping Station	151486E	042471N
Primary Discharge Effluent Sampling (ESW1)	Main Septic Tank	150566E	042741N
Proposed Influent p(ISW1)	At New WwTP	149752	042270
Proposed Effluent p(ESW1)	At New WwTP	149744	042326
[Upstream EPA] WFD Monitoring Station TW05003171AR1002	At Timoleague, River Argideen	147205	043811
[Downstream EPA] Transitional WFD Monitoring Station TW05003171AR1009	Courtmacsherry beach	151707	042994
Upstream aSW1u1	Inchy Bridge, River Argideen	146486	045753
Upstream aSW1u2	Spital Bridge, River Spital	146835	042533