

## OFFICE OF CLIMATE, LICENSING & RESOURCE USE.

# INSPECTORS REPORT ON A WASTE WATER DISCHARGE LICENCE APPLICATION

To: Dara Lynott, Director

From: Loretta Joyce Environmental Licensing Programme

Date: 8<sup>th</sup> October 2014

RE: Application for a Waste Water Discharge Licence from Irish Water for the Ballycotton agglomeration, Co Cork, Reg. No. D0516-01.

Application Details	
Schedule of discharge licensed:	Discharges from agglomerations with a population equivalent of 500 to 1,000 p.e.
Licence application received:	26/01/2010
Notices under Regulation 18(3)(b) issued:	20/08/2010
Information under Regulation 18(3)(b) received:	19/11/2010, 22/12/2010
Notices under Regulation 20 (1) issued:	15/04/2014
Information under Regulation 20(1) received:	03/07/2014
Site notice check:	21/02/2010
Site visit:	06/03/2014
Submissions Received:	08/04/2010 (HSE)

## 1. Agglomeration

This application relates to the Ballycotton and Environs agglomeration in County Cork. The application was originally made by Cork County Council and subsequently transferred to Irish Water on 1<sup>st</sup> January 2014 under the Water Services (No. 2) Act 2013.

This Ballycotton agglomeration had a population equivalent (p.e.) of 728 in 2011. A projected increase to 755 p.e. by 2020, provided by the applicant, is used in the mass balance below. There are no identified sources of industrial waste water in the agglomeration.

The sewerage network in Ballycotton comprises of two catchments. Waste water from the western catchment (approx. 403p.e.) flows by gravity to the WWTP which has primary treatment only and consists of a septic tank with a design capacity of

approx. 60p.e. Waste water from the eastern catchment (approx. 325p.e.) is not treated and flows directly to an outfall located on the pier. Given that the septic tank is severely overloaded, the waste water from the Ballycotton agglomeration is effectively discharged untreated. Ballycotton agglomeration is listed as having no treatment in the report *Focus on Urban Waste Water Treatment in 2012* (EPA, 2014).

Ballycotton was part of the Shannagarry/Garryvoe/Ballycotton Sewerage Scheme which was included on the Water Services Investment Programme (WSIP) 2010 – 2012 as a scheme at planning stage. At the time of the licence application, the applicant intended to procure a WWTP with a design capacity of 1,200 p.e., under design, build and operate (DBO) contract, with a new marine outfall into Ballycotton Bay, but this has not progressed.

The RL requires a new primary treatment system by 31<sup>st</sup> December 2019, to accommodate maximum loadings from the agglomeration to include inlet screens and appropriately sized primary settlement capacity. Condition 4.19 of the RL requires the licensee to submit the location of all discharges from the new WWTP, including primary discharge and storm water overflow, (6E, 6N grid reference) to the Agency prior to the commencement of operation of the new WWTP.

The licence applicant did not identify the location of a new marine outfall to Ballycotton Bay, therefore the proposed emission point cannot be assessed or authorised by this recommended licence. The licensee shall apply for a licence review, prior to the commencement of a new discharge, if the new primary discharge point is located a significant distance from the existing primary discharge point.

## 2. Discharges to waters

## Primary Discharge

The primary discharge (SW001) is the gravity outfall from the WWTP to Ballycotton Bay. A foreshore licence was granted on 04/04/53 (File Ref. MS51/8/250) for the primary discharge and a new foreshore licence application has been lodged with the Department of Agriculture, Food and the Marine for a new outfall from the proposed WWTP.

#### Secondary Discharges

The secondary discharge (SW002) is the gravity outfall from Ballycotton Pier to Ballycotton Bay. The RL requires the secondary discharge to cease by 31<sup>st</sup> December 2019.

#### Storm water overflows

There is one storm water overflow (SW003) from the WWTP and it discharges to Ballycotton Bay, via the primary discharge.

#### Emergency overflows

There are no emergency overflows from the agglomeration.

## 3. Receiving waters and impact

The following tables summarise the main considerations in relation to the receiving waters.

#### Table 1. Receiving waters

	Characteristic	Description	Comment
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Receiving water name and type	Ballycotton Bay IE_SW_040_0000	
Relevant designations within 10km	Ballycotton Bay SPA (Site Code: 004022)	70m west of SW001 900m west of SW002
	Garryvoe designated bathing area IESWBWC040_0000_0100	3.2km north of SW001 4km north of SW002
Drinking water abstraction within 10 km d/s	None	
Trophic Status	Ballycotton Bay	Not assessed, 2007-2009 Preliminary draft assessment is 'Unpolluted', 2010-2012
	Youghal Harbour, 11km north east of SW001	Unpolluted, 2007-2009
Bathing Water Quality	Garryvoe	'Sufficient' 2012 <sup>1</sup>
WFD Status	Moderate	2009 Preliminary draft assessment is 'Good', 2010 - 2012
WFD Risk Category	2b, water body not at significant risk of failing objectives	2008
WFD Objective	Restore good status	2021 deadline
WFD protected areas	None	

'Appropriate treatment' is required by the Urban Waste Water Treatment Regulations, S.I. NO. 254 of 2001, as amended, in respect of discharges to coastal waters for agglomerations below 10,000p.e. Appropriate treatment is defined in the Regulations in terms of the level of treatment necessary to protect water quality. Given that the draft 2010-2012 assessment of trophic status is 'Unpolluted', the Water Framework Directive draft 2010-2012 assessment status is 'Good' and Garryvoe had 'sufficient' bathing water quality in 2012, the discharges from the agglomeration do not appear to be adversely impacting on water quality in Ballycotton Bay. The Agency considers primary treatment to be 'appropriate treatment' in this case, in terms of the level of treatment necessary to protect the receiving water quality.

The effluent from the agglomeration is effectively untreated given that the septic tank is severely overloaded. The RL requires a new primary treatment system by 31<sup>st</sup> December 2019, to accommodate maximum loadings from the agglomeration to include inlet screens and appropriately sized primary settlement capacity. The RL does not require interim ELVs prior to 31<sup>st</sup> December 2019 given that effluent from the agglomeration is effectively untreated.

## 4. Site Visit

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<sup>&</sup>lt;sup>1</sup> The main parameters monitored are *E.Coli and Intestinal enterococci*. A value of 500cfu/100ml and 185cfu/100ml respectively indicates sufficient water quality under the Bathing Water Quality Regulations 2008, as amended. Monitoring is conducted between May and September.

I visited the Ballycotton agglomeration on 6<sup>th</sup> March 2014 and met with a representative of Irish Water. I visited the WWTP and observed the primary discharge point and receiving waters.

## 5. Ambient Monitoring

Schedule B.2 Receiving Water Monitoring of the RL specifies biannual monitoring of Ballycotton Bay.

The location identified by Cork County Council is aSW-1a (grid ref. 200015E 063940N) is located 40m from the secondary discharge at Ballycotton Pier and is unlikely to be a suitable ambient monitoring location if a new marine outfall is constructed. There are no suitable National Coastal Monitoring Stations in the vicinity of discharges from the agglomeration.

Condition 4.20 of the RL requires the licensee to submit a proposal for a suitable ambient monitoring point to the Agency for agreement within six months of date of grant of licence.

#### 6. Programme of Improvements

The applicant has prepared a proposal for a new WWTP as discussed above. A new primary treatment plant will be required by 31<sup>st</sup> December 2019.

## 7. Compliance with EU Directives

In considering the application, regard was had to the requirements of Regulation 6(2) of the Waste Water (Discharge) Authorisation, Regulations 2007 as amended, notably:

**Table 2. Compliance with EU Directives/Regulations** 

Compliance with Directives/Regulations	Description and Conditions in RL
Urban Waste Water Treatment Directive [91/271/EEC]	Appropriate treatment was required by 31st December 2005.
Water Framework Directive [2000/60/EC]	Restore Good status.  Discharge is to a coastal water, no designated salmonid waters.  No shellfish waters present.
EC Environmental Objectives (Surface Water) Regulations 2009, S.I. No. 272 of 2009, as amended	Schedule A of RL sets ELVs to contribute towards good status water quality standards.
Drinking Water Abstraction Regulations	No drinking water abstractions d/s
Bathing Water Directive [2006/7/EC]	Garryvoe designated bathing area located 3.2km north of SW001. Schedule A of RL sets ELVs to contribute towards good status water quality standards. Condition 6 requires the local authority (bathing water) to be notified after any incident.
Dangerous Substances Directive [2006/11/EC]	Condition 4 requires screening for priority substances.
Environmental Impact Assessment Directive [85/337/EEC]	An EIS was not required for Ballycotton WWTP.
Environmental Liability Directive	ELRA not required for discharges to

## 8. Habitats Directive (92/43/EC) & Birds Directive (79/409/EEC)

A screening for Appropriate Assessment was undertaken to assess, in view of best scientific knowledge and the conservation objectives of the site, if the activity, individually or in combination with other plans or projects is likely to have a significant effect on a European Site(s). In this context, particular attention was paid to the European Site at Ballycotton Bay SPA (Site Code: 004022) and the Agency considered, for the reasons set out below, that the activity is not directly connected with or necessary to the management of that site as a European Site and that it cannot be excluded, on the basis of objective scientific information following screening under this Regulation, that the activity, individually or in combination with other plans or projects, will have a significant effect on a European Site and accordingly determined that an Appropriate Assessment of the activity was required. It has been determined that the activity does have the potential for significant effects on a European Site due to poor effluent quality and the direct hydrological connectivity of the discharge to a European Site.

An Appropriate Assessment has been completed and has determined based on best scientific knowledge in the field and in accordance with the European Communities (Birds and Natural Habitats) Regulations 2011 and 2013, pursuant to Article 6(3) of the Habitats Directive, that the activity, individually or in combination with other plans or projects, will not adversely affect the integrity of a European Site(s) in particular Ballycotton Bay SPA (Site Code: 004022), having regard to its/their conservation objectives and will not affect the preservation of the site at favourable conservation status if carried out in accordance with this Recommended Licence and the conditions attached hereto for the following reasons: the RL requires a new WWTP from 31<sup>st</sup> December 2019, to contribute towards good status water quality standards required by the Environmental Objectives (Surface Water) Regulations 2009, as amended; the RL requires biannual ambient water quality monitoring; the limited volume of the discharge and the dilution available in the receiving water.

In light of the foregoing reasons, no reasonable scientific doubt remains as to the absence of adverse effects on the integrity of the Ballycotton Bay SPA (Site Code: 004022).

#### 9. Submissions

One submission was received in relation to this application from the HSE; Ms. Miriam Cashell, A/Principal Environmental Health Officer.

The submitter notes that, during construction phase, noise must be monitored to ensure that the daytime construction noise limit is managed and a pest control plan should be in place at all times to limit risk of pests from major earthworks.

The submitter further notes that, during operation of the plant, sampling, monitoring and analysis of the wastewater and sludge must be carried out including monitoring in Ballycotton Bay at the discharge points to ensure compliance with waste water treatment and bathing water legislation. Furthermore, noise and odour control measures must be in place and monitored as per the operational management plan for the WWTP.

Response: Construction phase noise monitoring and pest control plan may be required under the relevant planning permission and is not within the remit of the EPA wastewater discharge licence.

The RL requires bimonthly monitoring of effluent and biannual monitoring of Ballycotton Bay. The legislation governing this RL relates specifically to, and is restricted to, the regulation and control of waste water discharges from the agglomeration. Therefore any odour or noise issue that may be associated with the waste water works including the treatment plant cannot be addressed by this RL.

## 10. Charges

The RL sets a reduced annual charge for the agglomeration of €2,962.77 and is reflective of the monitoring and enforcement regime being proposed for the agglomeration, as only primary treatment is currently being provided.

#### 11. Recommendation

I recommend that a Final Licence be issued subject to the conditions and for the reasons as set out in the attached Recommended Licence.

Signed

Loretta Joyce

Inspector

**Environmental Licensing Programme** 

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