

This Report has been cleared for submission to the Board by Programme Manager: Frank Clinton Signed *Gráinne D'Ágáin* Date *26/11/09*



OFFICE OF CLIMATE,  
LICENSING & RESOURCE USE.

**INSPECTORS REPORT ON A WASTE WATER DISCHARGE LICENCE APPLICATION**

<b>To:</b>	DIRECTORS	
<b>From:</b>	Ann Marie Donlon	<b>Environmental Licensing Programme</b>
<b>Date:</b>	25 <sup>th</sup> November 2009	
<b>RE:</b>	Application for a Waste Water Discharge Licence from Cork County Council Southern Division, for the agglomeration named Ringaskiddy Village, Reg. No. D0436-01	

Application Details	
Schedule of discharge licensed:	Discharges from agglomerations with a population equivalent of 500 to 1,000.
Licence application received:	22/06/2009
Notices under Regulation 18(3)(b) issued:	None
Site notice check:	Non –compliant on 16/07/09 and 21/07/09
Regulation 12 compliance (site notice)	Verified on 06/08/09
Submission Received:	None

**1. Agglomeration**

This application relates to the Ringaskiddy village agglomeration and does not include Haulbowline Island or the industrial discharges from Ringaskiddy. The collection system drains *via* the primary discharge point only. There are no submersible pumping stations within the agglomeration.

There is currently no waste water treatment plant and the majority of waste water discharges untreated to Cork Harbour between West Passage and West Channel. Treated effluent from the National Maritime College discharges to the agglomeration. The Port of Cork Deep Water Berth, roll on – roll off facility discharges to the agglomeration but ships docked are not permitted to discharge. The estimated population equivalent (p.e.) for the agglomeration is 797, which includes an estimated load of 10% for pending development. The waste water is predominantly domestic with 10% attributed to commercial and institutional waste water.

It is proposed to eliminate the existing discharge under the Cork Harbour Main Drainage Scheme (also referred to as the Cork Lower Harbour Sewerage Scheme). On completion of the scheme any storm water overflows from this agglomeration will comply with current DoEHLG ‘Procedures and Criteria in relation to Storm Water Overflows’.

The Cork Harbour Main Drainage Scheme is for the provision of collection systems and waste water treatment facilities in the Cork Lower Harbour area serving the agglomerations of Cobh (D0043-01), Passage West /Monkstown (D0129-01), Crosshaven /Carrigaline / Ringaskiddy (D0057-01) and Ringaskiddy village (D0436-01). An Environmental Impact Statement for the proposed WWTP at Shanbally and associated works accompanied the application and the proposal was granted planning permission by An Bord Pleanála in July 2009. Separate planning approval will be required for the construction of pumping stations, holding tanks or outfalls for waste water or storm water associated with the conveyance system that form part of the Cork Harbour Main Drainage Scheme. The proposed Shanbally WWTP is to be located within the agglomeration of D0057-01, will have a design capacity of 80,000PE and will discharge through the existing deep water outfall at Dognose Bank (the primary discharge of D0057-01 licence application).

In broad terms, Cork County Council Southern Division submitted licence applications for four discrete collecting systems with untreated discharges (Cobh, Passage West-Monkstown, Ringaskiddy village, Crosshaven-Carrigaline-Ringaskiddy). The Cork Harbour Main Drainage Scheme was granted planning permission in July 2009 and this scheme will connect the four collecting systems and provide a WWTP by mid to late 2014. Consequently, only one large agglomeration will exist from 2015 with one primary discharge and no secondary discharges. Therefore only one licence will be relevant from 2015. This application is for existing untreated discharges from the Ringaskiddy village agglomeration.

The EIS for the Shanbally WWTP was received with this application as it relates to this waste water works. As the proposed WWTP is not planned to be operational before mid to late 2014 the application only relates to the existing untreated discharges.

The Urban Waste Water Treatment Regulations, 2001 (S.I. No. 254 of 2001) (UWW Regulations) apply to this agglomeration in so far as the waste water shall be subject to appropriate treatment by 31<sup>st</sup> December 2005.

## 2. Discharges to waters

The primary discharge is located between West Passage and West Channel of Cork Harbour (see figure 1). The levels of dangerous substances in the discharge were not deemed significant however the limit of detection for some parameters were insufficiently sensitive (Cu, Pb, Ni, Hg, Cd).

## 3. Receiving waters and impact

The following table summarises the main considerations in relation to the Cork Lower Harbour downstream of the primary discharge.

**Table 1.0 Receiving waters**

Characteristic	Classification	Comment
Receiving water name and type	Cork harbour	Coastal water body (SW_060_0000)
Resource use	Shipping, shell fish production	
Amenity value	Water sports, bathing	No designated bathing area but traditional bathing areas within the Harbour (Gobbin Head, Cuskinny, Aghada Pier).
Applicable Regulations	Shellfish waters <sup>1</sup>	Rostellan North, Rostellan South and Cork Great Island North Channel are designated <sup>2</sup> . No monitoring has been undertaken as this was designated in 2009.

	EU Regulation 854/2004	Class B 2008 (purification required before sale) for Oysters <sup>3</sup> . Based on bacteriological quality.
	EU Regulation 853/2004	Cork harbour mussel production area is currently closed due to biotoxins. <sup>4</sup>
	EO Regulations <sup>5</sup>	See WFD below for details.
Trophic Status <sup>6</sup>	Unpolluted 1995 –1999 Intermediate 1999-2005	Dis-improvement from '95-99. DIN level elevated.
WFD <sup>7</sup>	Status: Moderate	Inclusive of DIN and conservation status.
	Risk: 1a (at risk)	WWTPs and dangerous substances identified as pressures.
	Objective: Restore	Restore by 2015 to achieve Protected Area objective and Reduce Chemical Pollution objective.
WFD protected areas	SPA (4030)	Water dependant habitat & species, approx 1km from 1 <sup>o</sup> discharge.
	Lee estuary/ Lough Mahon	Nutrient sensitive area, approx 1km from 1 <sup>o</sup> discharge on a flooding tide.
	Rostellan North, Rostellan South and Cork Great Island North Channel	Shellfish waters
Other designations	Monkstown Creek pNHA	

**Note 1:** Quality of Shellfish Water, 2006 (S.I. 268 of 2006).

**Note 2:** European Communities (Quality of Shellfish Waters)(Amendment) Regulations 2009

**Note 3:** Source: Sea Fisheries Protection Authority website

**Note 4:** Source: Food Safety Authority of Ireland website

**Note 5:** European Communities Environmental Objectives (Surface Water) Regulations, 2009 (S.I. No. 277 of 2009)

**Note 6:** EPA (2008) Water Quality in Ireland 2004 – 2006

**Note 7:** Draft River Basin Management Plan for the South Western River Basin District and interactive maps, December 2008.

As described in Table 1 above, the main considerations in relation to Cork Harbour is its intermediate nutrient status, its recent designation as a shellfish waters, the occurrence of dangerous substances and an SPA.

Untreated discharges to Cork Harbour contribute to the Dissolved Inorganic Nitrogen (DIN) levels and the nutrient status of the water. Ringaskiddy village is a relatively small agglomeration in the lower harbour area and is located approximately 8 km from the shellfish area of Rostellan. As a predominately domestic waste water discharge the levels of dangerous substances in the discharge are anticipated to be low.

The impact on the environment of treated waste water from the Ringaskiddy village agglomeration that have undergone secondary treatment at the proposed Shanbally WWTP are considered in the inspectors report to the Crosshaven-Carrigaline-Ringaskiddy application (D0057-01).

Having regard to the grant of planning permission for Shanbally WWTP, the Recommended Licence (RL) requires the direct discharge from the Ringaskiddy Village agglomeration must cease by the 1<sup>st</sup> January 2015. The elimination of the primary discharge means that Cork Co.Council will need to seek a review or technical amendment of any licence granted to the Crosshaven-Carrigaline-Ringaskiddy agglomeration (D0057-01) to include within its scope the Ringaskiddy Village agglomeration.

Cork Co. Council has decided that secondary treatment at Shanbally of waste water entering the collecting system is appropriate treatment and the UWW Regulations requires appropriate treatment to be provided by 31<sup>st</sup> December 2005. In accordance with Agency policy and the combined approach, the RL specifies emission limit values on the basis of the limits specified in the UWW Regulations for discharges having undergone secondary treatment. The applicant cannot meet these emission limit values specified in the licence before the completion of the proposed WWTP and associated works.

The RL does not require monitoring of untreated discharges and the Urban Waste Water Treatment Regulations, 2001 (S.I. No. 254 of 2001) only requires monitoring of treatment plant discharges. To demonstrate that the water quality of Cork Harbour has not deteriorated in the interim (in accordance with Regulation 29(2)(c)), the RL requires an annual report on the water quality of Cork Harbour having regard to the Quality of Shellfish Water Regulations, 2006 (S.I. 268 of 2006) and the European Communities Environmental Objectives (Surface Waters) Regulations 2009 (S.I. 272 of 2009). If a deterioration in the status of the receiving waters is noted, and is attributed to the discharges from this waste water works, Condition 3.2 requires that the Water Services Authority take 'such measures as are necessary' to prevent such deterioration.

Since the RL requires the direct discharge from the Ringaskiddy Village agglomeration to cease by the 1<sup>st</sup> January 2015, no requirements are specified in relation to monitoring of influent or discharges, screening for priority pollutants, assessment of treatment capacities, and with regard to the condition on the Programmes of Improvements requirements are limited to the waste water works. Having regard to the dangerous substances, the RL requires the Programmes of Improvements to consider limitations applied to any industrial discharges.

#### **4. Programme of Improvements**

As stated above, Ringaskiddy village agglomeration comes within the Cork Harbour Main Drainage Scheme. The upgrading of the existing sewer network will aim to eliminate excessive infiltration, remediate structural damage and separate storm water as far as practicable. A new pumping station is proposed and that storm water overflows will be designed in accordance with the DoEHLG 'Procedures and Criteria in relation to Storm water Overflows', 1995. These works are due for completion by mid to late 2014. The scheme is listed on the Water Services Investment Programme 2007-2009.

The Recommended Licence (RL) requires that the discharge from Ringaskiddy village cease from 1<sup>st</sup> January 2015. Given that there will be no primary discharge from the agglomeration from 2015, the licence will cease to have effect as the agglomeration is integrated into a larger agglomeration. The specifics of the improvement works are not yet finalised.

#### **5. 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 (S.I. No. 684 of 2007) notably:

a. Water Framework Directive [2000/60/EC]

As discussed above the RL requires that there will be no further deterioration of the receiving water quality as a result of these discharges and requires that untreated waste water discharges will cease by 1<sup>st</sup> January 2015.

b. Urban Waste Water Treatment Directive [91/271/EEC]

The receiving water is not designated sensitive. This agglomeration is not in compliance with the UWW Regulations and the RL not only requires discharges to discontinue by the 1<sup>st</sup> January 2015 but sets limits based on the combined approach. Connecting this collection system to the Crosshaven-Carrigaline-Ringaskiddy agglomeration and the provision of secondary treatment will meet the requirements of the UWW Regulations.

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c. Shellfish Waters Directive [2006/113/EC]

Untreated discharges are exerting pressure on the microbiological quality of the shellfish waters. The RL requires discharges to cease by 1<sup>st</sup> January 2015.

d. Dangerous Substances Directive [2006/11/EC]

The RL requires discharges to be discontinued and the Programmes of Improvements includes an assessment of industrial discharges to the collecting system.

e. Birds Directive [79/409/EEC] & Habitats Directive [92/43/EEC]

Untreated waste water discharges to Cork Harbour is the current and historical situation that prevails. The primary discharge is approximately 1km from the SPA. There is no evidence of an on-going impact on the SPA and the site synopsis to the SPA states '*polluted conditions may not be having significant impacts on the bird populations*'. So long as there is no further deterioration in water quality the untreated discharges are not considered to have a likely significant effect on the current conservation status of the SPA. The impact of secondary treatment of waste water is discussed in more detail in the inspectors report to Crosshaven-Carrigaline-Ringaskiddy agglomeration (D0057-01) but in summary the proposal will benefit the SPA.

## 6. Submissions

No submissions received in relation to this application.

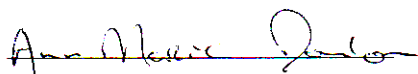
## 7. Charges

The RL sets an annual charge for the agglomeration at €1,614 and is reflective of the monitoring and enforcement regime being proposed for the agglomeration. Sampling and analysis of untreated discharge is not proposed.

## 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



Ann Marie Donlon

Office of Climate, Licensing and Resource Use



Figure 1: Ringaskiddy village discharge and SPA (green stripe)

