Comhairle Contae Chorcaí Cork County Council

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Administration,
Environmental Licensing Programme,
Office of Climate, Licensing & Resource Use,
Environmental Protection Agency,
Headquarters,
PO Box 3000,
Johnstown Castle Estate,
County Wexford

11th February 2011

Re: A0401-01 – Ring Waste Water Discharge Certificate of Authorisation – Reply to Notice in accordance with Regulation 25(c)(ii) of the Waste Water Discharge (Authorisation) Regulations 2007

Dear Ms. English,

I refer to your letter of the 31st January 2011 concerning the above. The following is our reply to your request for further information in accordance with Regulation 25(c)(ii).

Assessment of Effects of the Waste Water Discharges on European Sites With reference to Circular L8/08 and the flow diagram in Appendix 1 attached, it can be concluded that the wastewater discharging from the agglomeration will not have significant effects on any relevant European sites.

The discharge point from the agglomeration is to a percolation area and is adjacent to Clonakilty Bay SAC & SPA. Clonakilty Bay is a large, well exchanged body of water with high dilution and the treatment plant in Ring serves 4 dwelling houses with a current PE of 12. A Habitats Directive Assessment (Screening Report) for Ring Agglomeration has been carried out and is attached. It can be concluded from this that an appropriate assessment is not required for this agglomeration.

Yours sincerely.

Niall O'Mahony, Senior Engineer,

Cork County Council

Enclosures

Wastewater Discharge Certificate of Authorisation: A0401-01 Ring

Circular L8/08 2 September 2008 Water Services Investment and Rural Water Programmes – Protection of Natural Heritage and National Monuments

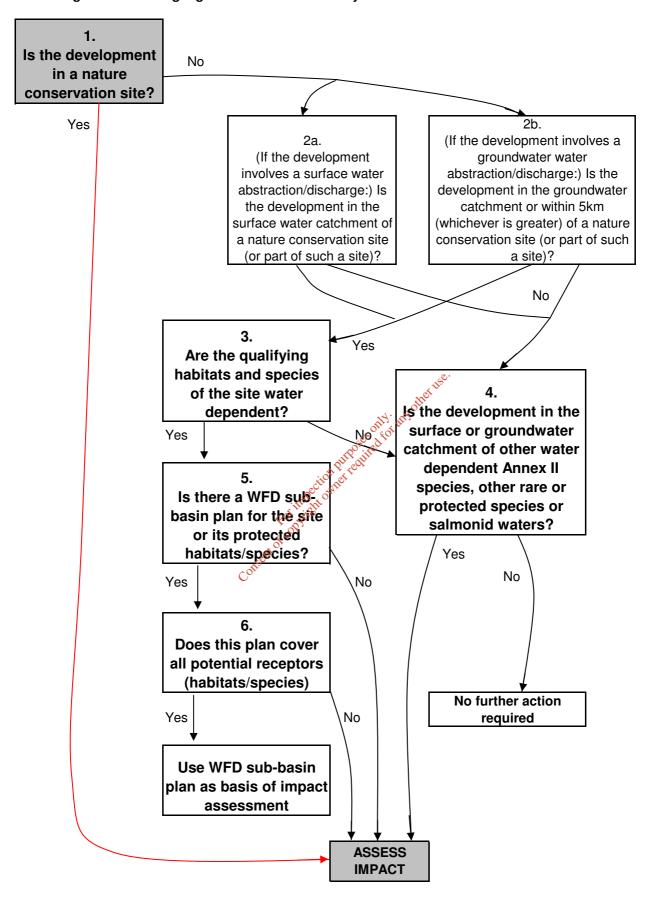
APPENDIX 1

Water Services Schemes - Natural Heritage Checklist for Local Authorities

What projects must be screened?

For new projects and significant changes to any existing operations, if the answer is 'yes' to any of the following, the project (i.e. construction, operation and maintenance) must be screened for its impacts:	
Is the development in or on the boundary of a nature conservation site NHA/SAC/SPA?	Yes
2. Will nationally protected species be directly impacted? Wildlife Acts (1976 and 2000), Flora Protection order (S.I. 94 of 1999)?	No
3. Is the development a surface water discharge or abstraction in the surface water catchment, or immediately downstream of a nature conservation site with water dependant qualifying habitats/ species?	No
4. Is the development a groundwater discharge or abstraction in the ground water catchment or within 5 km of a nature conservation site with water-dependant qualifying habitats/species?	Yes
5. Is the development in the surface water or groundwater catchment of salmonid waters?	No
6. Is the treatment plant in an active or former floodplain or flood zone of a river, lake, etc?	No
7. Is the development a surface discharge or abstraction to or from marine waters and within 3km of a marine nature conservation site?	No
8. Will the project in combination with other projects (existing and proposed) or changes to such projects affect the hydrology or water levels of sites of nature conservation interest or the habitats of protected species?	No

Flow Diagram - Route Highlighted Red & Shaded Grey



Conclusion: A Screening Report is required for Ring

Habitats Directive Assessment (Screening Report) in respect of

Application by Cork County Council to the EPA

for discharge license in respect of the

Treatment .

A0401-01

February 2011 and other use.

February 2011 and other use.

Consent of convingnost of the property of t **Ring Waste Water Treatment Plant**

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Introduction

1.1 Ring is a settlement located within 2km of Clonakilty on the eastern side of Clonakilty Bay. The village of Ring has one septic tank with an associated collection network. The septic tank is located to the northern end of the village and it serves 4 no. council houses.

The septic tank provides primary settlement only. The discharge from the septic tank enters groundwater via a percolation area located adjacent to the septic tank. The tank has a design PE of 30.

1.2 The treatment plant and percolation area is located adjacent to the Clonakilty Bay Special Area of Conservation and Special Protection Area which is designated under the EU Habitats Directive (92/43/EEC) as transposed into Irish Law under the European Union (Natural Habitats) Regulations SI 94/1997. As this is the case, and in accordance with requirements under this Directive, the potential impacts of proposed developments that have the potential to impact on Special Areas of Conservation must be assessed. The procedure to do this is called a Habitats Directive Assessment. The purpose of such an assessment is to identify whether there may be potential for elements of the project to have a significant impact on nature conservation sites within its impact zone, and if so, to predict the potential for such impacts to affect the overall integrity of such nature conservation sites. The European Union has guidance as to how to make a Habitats Directive Assessment which identifies four main stages in the process as follows:

Stage One: Screening
The process which identifies the likely impacts upon a Natura 2000 site of a project or plan, wither alone or in combination with other projects or plans, and considers whether these impacts are likely to be significant.

Stage Two: Appropriate assessment

The consideration of the impact on the integrity of the Natura 2000 site of the project or plan, either alone or in combination with other projects or plans, with respect to the site's structure and function and its conservation objectives. Additionally, where there are adverse impacts, an assessment of the potential mitigation of those impacts.

Stage Three: Assessment of alternative solutions

The process which examines alternative ways of achieving the objectives of the project or plan that avoid adverse impacts on the integrity of the Natura 2000 site.

Stage Four: Assessment where no alternative solutions exist and where adverse impacts remain.

An assessment of compensatory measures, where in the light of an assessment of imperative reasons of overriding public interest, it is deemed that the project or plan should proceed.

1.3 This document brings together all of the information necessary to make determination as to whether there are likely to be significant impacts arising from the Ring Waste Water Treatment Plant on the adjacent Clonakilty Bay Special Area of Conservation and Special Protection Area and represents the first stage of this process (Screening).

Step 1:

Provide a description of the plan and other plans and projects that, in combination, have the potential to have significant effects on Natura 2000 sites within the potential impact zone;

Step 2:

Identify Natura 2000 sites which may be impacted by the plan, and compile information on their qualifying interests and conservation objectives;

Step 3:

Determine whether the plan needs to be screened for potential impacts on Natura 2000 sites;

Step 4:

Carry out an assessment of likely effects - direct, indirect and cumulative - undertaken on the basis of available information as a desk study or field survey or primary research as necessary;

Step 5:

Assess the significance of any such effects on the Natura 2000 sites within the impact zone.

1.4 The assessment has been prepared in accordance with the following guidance:

European Commission (2000) Managing Natura 2000 sites: the provisions of Article of the Habitats Directive 92/43/EEC.

European Commission (2001) Assessment of plans and projects significantly affecting Natura 2000 sites: Methodological guidance on the provisions of Articles 6(3) and (4) of the Habitats Directive 92/43/EEC.

Appropriate Assessment of Plans and Projects in Ireland. Guidance for Planning Authorities. Environment, Heritage and Local Government, 2009.

2 Appropriate Assessment Screening Matrix

2.1 Description of project	
Location	Ring, Clonakilty, Co. Cork. See attached Map.
Description of the key components of the project	The treatment system in Ring provides primary treatment. It has a design p.e. of 30 and treats wastewater from 4 dwellings. Treated effluent from the plant discharges to a percolation area adjacent to the tank.
Distance from designated sites in potential impact zone*	Discharge is approximately 100m from the adjacent Clonakilty Bay SAC & SPA

2.2 Description of the Natura 2000 sites within the potential impact zone ¹			
Name	Clonakilty Bay Special Area of Conservation & Special Protection Area		
Site Code	(SAC) 000091 (SPA) 004081		
Site Description	Clonakilty Bay in west Cork is an inter-tidal expanse that stretches from Clonakilty to the open sea, and comprises two small estuaries separated by Inchydoney Island. The site also includes adjacent sand dunes and inland marshes, and is a coastal complex with a good diversity of habitats. The discharge from the Ring Wastewater Treatment Plant enters a percolation area. More information on the Clonakilty Bay SAC is contained appendix 1 of this document.		
Qualifying Interests of Clonakilty Bay SAC.			
Qualifying Interests of Clonakilty Bay SPA.			

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 $^{^{1}}$ Natura 2000 sites within the potential impact zone of the proposed development have been identified in accordance with guidance provided in the NPWS circular L8/08.

	Plover, Bar-tailed Godwit & Little Egret.		
Conservation Objectives	Objective 1:	To maintain the Annex 1 habitats for which the cSAC has been selected at favourable conservation status: Mudflats and sandflats not covered by seawater at low tide; Annual vegetation of drift lines; Embryonic shifting dunes; Shifting dunes along the shoreline with Ammophila arenaria (white dunes); Fixed coastal dunes with herbaceous vegetation (grey dunes); Atlantic decalcified fixed dunes (Calluno-Ulicetea).	
	Objective 2: To maintain the extent, speand biodiversity of the entire site.		
	Objective 3:	To establish effective liaison and co- operation with landowners, legal users and relevant authorities.	
	Source - National Parks and Wildlife Service		

2.3	Assessment	Criteria

Describe the individual elements of the project (either alone or in combination with other plans or projects) likely to give rise to impacts on the Natura 2000 site.

Discharge from Ring WWTP:

Treated wastewater from the Ring Waste Water Treatment Plant is discharged to a percolation area adjacent to the SAC of Clonakilty Bay

The discharge consists of treated effluent from the Ring Waste Water Freetment Plant.

Other Discharges within the SAC: Clonakitty WWTP.

See Map in Appendix 2 for discharge locations.

Describe any likely direct, indirect or secondary impacts of the project (either alone or in combination with other plans or projects) on the Natura 2000 site taking into account the following:

- o Size and scale
- Land-take
- Distance from the Natura 2000 site or key features of the site:
- Resource requirements (water abstraction etc.)
- Emissions (disposal to land, water or air)
- Excavation

Discharges could give rise to elevated nutrients entering the groundwater on Ring. Increased nutrient levels may impact on the ecology of an area by changing the composition of floral communities and reducing the ability of less robust plants to survive. Increased nutrient levels may also result in increasing the invertebrate populations in the surrounding waters, thereby increasing bird population levels.

However the potential for the treatment plant to result in elevated nutrients in the surrounding waters is reduced by two main factors:

- 1. The treatment provided is considered as appropriate as set out in the Urban Wastewater Treatment Regulation standards for p.e <2000.
- 2. The treated effluent enters a percolation area adjacent to Clonakilty Harbour which is a large and well exchanged body of water with unlimited dilution capacity.

Requirements	
 Transportation 	
Requirements	
 Duration of construction, 	
operation,	
decommissioning	
o Other.	
g Guion	
Describe any likely changes	Reduction in habitat area:
to the site arising as a result	Treated effluent is discharging to groundwater and
of:	adjacent to Clonakilty Harbour. This Bay is a large well-
	exchanged body of water where dilution and dispersion
 Reduction in habitat 	potential is high. No significant impacts are evident or
area	predicted on habitats within Clonakilty Bay from the
Disturbance to key	operation of this facility.
species o Habitat or species	Disturbance to key species:
fragmentation	The operation of the WWTP does not cause any disturbance
 Reduction in species 	to habitats & species within the SAC & SPA.
density	to habitate a species within the site a sivil
 Changes in key 	Habitat or species fragmentation:
indicators of	No habitat fragmentation has been caused as a result of
conservation value	the operation of this facility.
(water quality etc)	
 Climate Change 	Reduction in species density:
	Treated effluent is discharging to a percolation area. No
	significant impacts are evident or predicted on species for
	which the SAC & SPA are designated.
	Changes in key indicators of conservation value eg water
	quality:
	There has been no significant changes in key indicators of
	conservation value as a result of the operation of this
	facility
	For Wills
Describe any likely impacts	Interference with the key relationships that define the
on the Natura 2000 site as a	structure of the site:
whole in terms of:	The structure of the SAC & SPA is not impacted by the
lataufavanaa with tha	operation of this facility.
 Interference with the key relationships 	
that define the	Interference with key relationships that define the
structure of the site	function of the site:
 Interference with 	The function of the SAC & SPA is not impacted by the
key relationships	operation of this facility.
that define the	
function of the site	
Describe from the above	No significant impacts are predicted.
those elements of the	
project of plan, or combination of elements,	
where the above impacts are	
likely to be significant or	
where the scale or	
magnitude of impacts is not	
known.	

3. Finding of No Significant Effects Report Matrix

Name of project or plan	Ring WWTP discharge
Name of project of plan	King wwir discharge
Name and location of Natura 2000 site	Clonakilty Bay SAC & SPA
Description of the project or plan	The treatment system in Ring is a septic tank and percolation area and the wastewater receives primary treatment. It has a design p.e. of 30. Treated effluent from the treatment plant discharges to a percolation area adjacent to the plant.
Is the project or plan directly connected with or necessary to the management of the site (provide details)?	No
The assessment of significance	e of effects
Describe how the project or plan (alone or in combination) is likely to affect the Natura 2000 Site.	Discharges from the Ring WWTP either alone or in combination with discharges from other sources could give rise to elevated nutrients entering Clonakilty Harbour. Increased nutrient levels may impact on the ecology of an area by changing the composition of floral communities and reducing the ability of less robust plants to survive. Increased nutrient levels may also result in increasing the invertebrate populations in the harbour, thereby increasing bird population levels. The discharge from Ring is a very small volume effluent and is considered as appropriately treated under the Urban Wastewater Treatment Regulations, it is considered that the discharge from Ring is not contributing negatively on the SAC & SPA.
Explain why these effects are not considered significant.	Appropriate treatment is being carried out as laid down in the Urban Waste Water Treatment Regulations. No significant impacts are evident or predicted on species for which the SAC & SPA are designated.
List of agencies consulted: provide contact name and telephone or email address Response to consultation	National Parks and Wildlife Service - Web site

Data collected to carry out the assessment			
Who carried out the assessment	Sources of data	Level of assessment completed	Where can the full results of the assessment be accessed and viewed
Orla O'Brien, Cork County Council	Waste water Certificate of Authorisation application Report prepared by Cork County Council	Desktop review of cited data.	This report.

Appendix 1 SITE SYNOPSIS

SITE NAME: CLONAKILTY BAY

SITE CODE: 000091

Clonakilty Bay in west Cork is an inter-tidal expanse that stretches from Clonakilty to the open sea, and comprises two small estuaries separated by Inchydoney Island. The site also includes adjacent sand dunes and inland marshes, and therefore is a coastal complex with a good diversity of habitats including several habitats listed on Annex I of the EU Habitats Directive.

Sand flats dominate the inter-tidal area, although mud flats occur at the sheltered upper end of the inlets. The vegetation consists of algal mats (*Enteromorpha* spp.) with brown seaweeds (*Fucus* spp.) occurring where the coast is rocky. The invasive Cord-grass (*Spartina* sp.) occurs in places. The intertidal flats have a typical diversity of macro-invertebrates, including *Arenicola marina*, *Scrobicularia plana*, *Hediste diversicolor*, *Nephtys hombergii*, *N. cirrosa*, *Hydrobia ulvae* and *Cerastoderma edule*.

Sand dunes grade from a strandline, colonised by Frosted Orache (*Atriplex laciniata*), Sea Sandwort (*Honkenya peploides*) and Sea Rocket (*Cakile maritima*), through to fixed dunes vegetated by grasses, small herbs and several species of orchid. They also support an interesting array of introduced plants, amongst which Great Mullein (*Verbascum thapsus*), Viper's-bugloss (*Echium vargare*) and Teasel (*Dipsacus fullonum*) are the most noticeable. Embryonic shafting dunes and white *Ammophila* dunes are also represented. Of particular interest is a small area of decalcified dune heath with some *Ulex europaeus*.

Inland of the western estuary, an extensive area of wetland occurs, which in itself contains a fine range of habitats from saline lagoons, to brackish grasslands, open freshwater marsh and Alder (*Alaus glutinosa*) scrub. Species found here are characteristic of marshy areas and include Creeping Bent (*Agrostis stolonifera*), Water Horsetail (*Equisetum fluviatile*), Marsh Cinquefoil (*Potentilla palustris*) and Marsh Willowherb (*Epilobium palustre*). The saline influence is evident by the occurrence of species such as Saltmarsh Rush (*Juncus gerardii*) and Sea Rush (*J. maritimus*).

The site contains a good diversity and density of waterfowl, with over 7,000 waders and wildfowl occurring regularly. Seven species have populations of national importance: Shelduck (168), Grey Plover (76), Lapwing (2,509), Dunlin (1,508) Curlew (1,231), Redshank (263) and Greenshank (27). The site is most noted, however, for its population of Black-tailed Godwit (866), which is of international importance and comprises over 10% of the national total. Amongst the other species which occur, there are notable populations of Golden Plover and Bar-tailed Godwit, both of which are listed on Annex I of the EU Birds Directive. All counts given are average winter peaks over either two or three seasons from 1994/95 to 1996/97. Herons commonly use the site and a heronry exists in the trees near Clonakilty.

Otter spraints were found frequently during a recent survey of the marsh area.

The site is under pressure from a number of sources, notably recreation and tourism developments and agricultural improvements, including drainage and fertiliser application.

This site is of considerable scientific interest because it contains a good diversity of coastal habitats. These habitats show a succession from salt to freshwater influences and include six which are listed on Annex I of the EU Habitats Directive. Its value is enhanced considerably by the birdlife it supports. The occurrence of Black-tailed Godwit in internationally important numbers is particularly significant. The site also supports nationally important numbers of seven other species of waterfowl as well as two species listed on Annex I of the EU Birds Directive.

7.8.1999



Map of Ring & Clonakilty Bay SAC & SPA



The treatment system in Ring is a primary treatment plant (septic tank & percolation area). It has a design p.e. of 30. Treated effluent from the treatment plant discharges to a percolation area adjacent to Clonakilty Harbour.

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Edition Plant discharges to Adjacent to Clonakilty Harbour.

Appendix 2: Map showing locations of all discharges into Clonakilty Bay SAC & SPA.



