

Administration,  
Environmental Licensing Programme,  
Office of Climate, Licensing & Resource Use,  
Environmental Protection Agency,  
headquarters, PO Box 3000,  
Johnstown, Castle Estate,  
County Wexford.  
Your Ref.: A0349-01

Our reference : MS/Inchi/11

4<sup>th</sup> March 2011

Sub.: Inchegeelagh Agglomeration (Register No. A0349-01) Regulation 25(c)(ii) Further Information Response

Dear Sir/Madam,

With reference to your letter of the 14 of December 2010, please find the following attached:

- 1 Original of the Inchegeelagh Agglomeration (Register No. A0 349 -01) Regulation 25(c)(ii) Further Information Response & attachments.
- 1 Copy of the Inchegeelagh Agglomeration (Register No. A0 361 -01) Regulation 25(c)(ii) Further Information Response & attachments.
- 1 CDROM with the Further Information Response & attachments in PDF Format.

Yours faithfully,

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Noel O'Keeffe,  
County Engineer & Director of Water Services,  
Cork County Council,  
County Hall, Cork.

## Inchigeelagh Regulation 25 Further Information Response

Wastewater Discharge Licence Application: A0349-01

Circular L8/08 2 September 2008

Water Services Investment and Rural Water Programmes –  
Further Information Response

- Question 1 Assess the likelihood of significant effect of the waste water discharges from the above agglomerations on the relevant European sites by referring to Circular L8/08 “Water Services Investment and Rural Water Programmes – Protection of Natural Heritage and National Monuments” issued by the Department of Heritage and Local Government. In particular, the flow diagram in Appendix 1 should be completed and the results of each section recorded. Provide details of the results of this assessment within one month of the date of this notice and provide a reasoned response for the decision. If significant effects are likely then and appropriate assessment must be carried out and a report of this assessment forwarded to the Agency by the date specified below.
- You are advised to provide the requested information in accordance with the “Note on Appropriate Assessments for the purposes of the Waste Water Discharge (Authorisation) Regulations, 2007 (S.I. 684 of 2007)”.

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:	
1. Is the development in or on the boundary of a nature conservation site NHA/SAC/SPA?	No
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?	No
5. Is the development in the surface water or groundwater catchment of salmonid waters?	yes
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
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## 1 Introduction

1.1 Inchigeelagh is located approximately 15 kilometres southwest of Macroom. The village is situated on the R-584-157 regional route connecting Macroom with Bantry. In the overall strategy of this Local Area Plan, Inchigeelagh is designated as a village within the Macroom Electoral Area. The village has experienced a large amount of development over the last few years.

The Waste Water Works and the activities carried out therein.

The Inchigeelagh Agglomeration can be split up into 2 catchments.

### The Northern Catchment

The northern catchment consists of all of Inchigeelagh Village North of the River Lee. In general the sewer network runs East-West along the Macroom Road (R-584-157) and then South towards Inchigeelagh Bridge. This is a combined sewer system. The sewerage from this catchment is discharged directly to the River Lee at the primary discharge point.

### The Southern Catchment

The southern catchment consists of all of Inchigeelagh Village South of the River Lee. In general the sewer network runs North towards Inchigeelagh Bridge, it then runs to the East, towards the septic tank. This is a combined sewer system.

The septic tank which serves this catchment is operated by Cork County Council.

The system is comprised of the following;

- Storm Overflow Chamber
- Inlet
- Septic Tank
- Soakway
- Outlet

The septic tank was built in the 1960s with a capacity of 90PE. The current load on the septic tank is approximately 53PE. It is therefore operating within its capacity. The septic tank provides only preliminary treatment. The passage of sewage through a septic tank helps in the removal of suspended solids but there is very little biological activity and the removal of BOD is not significant. This septic tank discharges to the adjacent River Lee.

The septic tank currently does not have any sampling regime in place.

The sources of emissions from the waste water works.

The population load for the Inchigeelagh agglomeration arises from the following sources:

- Domestic Population
- Commercial Premises
- School
- Infiltration

The sewage from all non-domestic premises is collected via the existing sewer network and is treated in conjunction with the domestic waste at the Septic tank. The septic tank does not receive any other sludge imported from other municipal waste water sources or septic tanks.

Other potential emissions from the waste water treatment plant include;

- Odour generated from the treatment process – No recorded issues to date.
- Noise pollution – No recorded issues to date.

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 final effluent from the septic tank in the southern catchment and the outfall in the northern catchment discharges to the River Lee which runs through the village from West to East. The average outfall from the septic tank in the southern catchment is in the order of 12m<sup>3</sup>/day which is equivalent to a PE of 53. The average outfall from the northern catchment is in the order of 35.8m<sup>3</sup>/day which is equivalent to a PE of 159.

## 1.2 Documentations

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 discharge on the designated sites within the catchment area.

These are :-

SAC/SPA – The Gearagh – Located on River Lee approx 10km of Inchigeela discharges.

Based on the preliminary flow chart already carried out, the need for an assessment is solely to assess the impact of the discharge on the salmonoid waters of the Lee. The septic tank discharges directly into River Lee ( Upper Lee Catchment Area).

## 2 Appropriate Assessment Screening Matrix

2.1 Description of project	

Location	<u>Inchigeelagh</u>
Description of the key components of the project	The final effluent from the septic tank in the southern catchment and the outfall in the northern catchment discharges to the River Lee which runs through the village from West to East. The average outfall from the septic tank in the southern catchment is in the order of 12m <sup>3</sup> /day which is equivalent to a PE of 53. The average outfall from the northern catchment is in the order of 35.8m <sup>3</sup> /day which is equivalent to a PE of 159.
Distance from designated sites in potential impact zone	Discharges directly into Salmonoid river (River Lee), refer to page 31 of the Inchigeelagh application form.

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2.2 Description of the Natura 2000 sites within the potential impact zone <sup>1</sup>	
Name	None within impact zone.  Designated sites within the area are :  The Gearagh SAC/SPA is located on the River Lee approx 10km downstream of the Inchigeela discharge locations.
Site Code	N/A

<sup>1</sup> 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.

### 2.3 Assessment Criteria

<p>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 Salmonoid River.</p>	<p><b>Inchigeelagh waste treatment works</b>  The final effluent from the septic tank in the southern catchment and the outfall in the northern catchment discharges to the River Lee which runs through the village from West to East. The average outfall from the septic tank in the southern catchment is in the order of 12m<sup>3</sup>/day which is equivalent to a PE of 53. The average outfall from the northern catchment is in the order of 35.8m<sup>3</sup>/day which is equivalent to a PE of 159.</p> <p><b>Other Discharges in the vicinity:</b></p> <p><b>Ballingeary</b> septic tank discharges directly into the lee approximately 5km upstream of Inchigeela.</p> <p><b>Coolcower</b> septic tank and WWTP discharge directly into the River Lee approx 11km downstream Inchigeela and approx 1km downstream of the Gearagh SAC.</p> <p><b>Macroom WWTP</b> discharges into the Sullane River just upstream of its confluence with the Lee and approx 10km downstream of Inchigeela.</p>
<p>Describe any likely direct, indirect or secondary impacts of the project (either alone or in combination with other plans or projects) on the Salmonoid river taking into account the following:</p> <ul style="list-style-type: none"> <li>○ Size and scale</li> <li>○ Land-take</li> <li>○ Distance from the Natura 2000 site or key features of the site:</li> <li>○ Resource requirements (water abstraction etc.)</li> <li>○ Emissions (disposal to land, water or air)</li> <li>○ Excavation Requirements</li> <li>○ Transportation Requirements</li> <li>○ Duration of construction,</li> </ul>	<p>Untreated discharges could give rise to elevated nutrients entering the River Lee. Increased nutrients could have a negative impact on the fish life in the river.</p>

<p>operation, decommissioning</p> <ul style="list-style-type: none"> <li>○ Other.</li> </ul>	
<p>Describe any likely changes to the site arising as a result of:</p> <ul style="list-style-type: none"> <li>○ Reduction in habitat area</li> <li>○ Disturbance to key species</li> <li>○ Habitat or species fragmentation</li> <li>○ Reduction in species density</li> <li>○ Changes in key indicators of conservation value (water quality etc)</li> <li>○ Climate Change</li> </ul>	<p><b>Reduction in habitat area:</b> N/A</p> <p><b>Disturbance to key species:</b> Increased nutrients in the river Lee downstream of the discharge location could have a negative effect on fish numbers in the Lee. However there is no evidence to support this.</p> <p><b>Habitat or species fragmentation:</b> No evidence of species fragmentation in the Gearagh</p> <p><b>Reduction in species density:</b> N/A.</p> <p><b>Changes in key indicators of conservation value eg water quality:</b></p> <p>The South Western River Basin District have carried out a Water Management Unit Report on the Upper lee Catchment. This includes all the tributaries to the Lee upstream of Macroom. The upper Lee is classified as having good water quality. The intention of the SWRBD is to preserve this good quality.</p> <p>The EPA water monitoring sites in the vicinity give a consistent Q rating of 4-5 upstream of the discharge location. Downstream of the discharge location has a Q rating of 4</p> <p>As part of the Application process Cork County Council carried out limited sampling of water immediately upstream and downstream of the discharge point (depending on safe access) There is no evidence of deterioration of water quality associated with these results.</p> <p>Salmonoid waters monitoring carried out on the river Lee downstream of Inchigeela also indicates good water quality with no evidence of negative impacts due to Inchigeela discharge.</p>

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Describe from the above 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.	No significant impact
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### 3. Finding of No Significant Effects Report Matrix

3.1 Project Description	
Name of project or plan	<b>Inchigeelagh</b>
Name of salmonoid River	River Lee
Description of the project or plan	The final effluent from the septic tank in the southern catchment and the outfall in the northern catchment discharges to the River Lee which runs through the village from West to East. The average outfall from the septic tank in the southern catchment is in the order of 12m <sup>3</sup> /day which is equivalent to a PE of 53. The average outfall from the northern catchment is in the order of 35.8m <sup>3</sup> /day which is equivalent to a PE of 159.
Is the project or plan directly connected with or necessary to the management of the site (provide details)?	No

3.2 The assessment of significance of effects	
Describe how the project or plan (alone or in combination) is likely to affect the river	The receiving water Body of Inchigeelagh Waste Water Treatment System is the River Lee. All effluent from the treatment system is discharged via the primary discharge point into the River Lee. There are no discharges to ground or any other media. The River Lee (Water Body Code IE_SW_19_1901, EPA River Code 19L03) is contained within Hydrometric Area 19. The River Lee rises approximately 6km west of Ballingearry village, in the mountainous terrain at Gougane Barra Lake.



	<p>The River flows in an easterly direction through Ballingearry village, feeding Lough Allua before eventually discharging to Cork Harbour. The river is approximately 72km long The River Lee at Inchigeelagh is a fast – flowing river, which drains a large upland area including Gougane Barra Lake.</p>
<p>Explain why these effects are not considered significant.</p>	<p>Water quality in the River Lee is monitored by the EPA in a number of different stations. EPA station 0100 Inchinossig Bridge, is located approximately 750m up-stream of the discharge points. Water quality in this station had a Q4-5 value from 1986 to 2002. The Q-value dropped in 2005 to Q4 and has maintained that value in 2008.</p> <p>EPA station 0200 at the Footbridge at Castlemasters, is located approximately 9km downstream of the Inchigeelagh Waste Water Treatment System discharge point. Water quality in this station has had a constant value of Q4 since 1999. The monitoring results are shown in Table F1.1 page 27 of the Inchigeelagh application form.</p>

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
Mahmoud Shaladan & Madeleine Healy, Cork County Council	Cork Co Council EPA water quality monitoring data	Desktop review of cited data.	This report.

Question 2 Confirmation whether the waste water from the northern catchment-Carrigeigh is discharges untreated to the River Lee.

**The northern catchment consists of all of Inchigeelagh Village North of the River Lee. The sewerage from this catchment is discharged directly to the River Lee at the primary discharge point.**