



OFFICE OF CLIMATE,
LICENSING & RESOURCE
USE.

**INSPECTORS REPORT ON A WASTE WATER DISCHARGE
CERTIFICATE OF AUTHORISATION APPLICATION**

To:	Frank Clinton, Programme Manager, ELP		
From:	Yvonne English	Environmental Programme	Licensing
Date:	22 June 2011		
Re:	Application for a Waste Water Discharge Authorisation from Cork County Council, for the agglomeration named Cecilstown & Environs, Reg. No. A0319-01.		

Application Details	
Schedule of Discharge Authorised:	Discharges from agglomerations with a population equivalent less than 500
Certificate of Authorisation Application Received:	05 November 2010
Submission(s) Received:	No

This application relates to the Cecilstown & Environs agglomeration in County Cork. The agglomeration currently has a population equivalent (p.e.) of 103. The agglomeration is serviced by one waste water treatment plant (WWTP). The WWTP provides secondary treatment, consisting of screening, aeration and clarification, and has a design capacity of 600 p.e.

The WWTP discharges to a tributary of the Finnow Stream. Based on the nearest EPA water quality monitoring station, 6.7km downstream, the biological Q-value is Q3-4 (sampled in 2009).

The agglomeration is discharging upstream of an area known for the presence of the pearl mussel (*Margaritifera margaritifera*). The pearl mussel site is approximately 8km downstream. The Cecilstown WWTP has been identified by the National Parks and Wildlife Service (NPWS) as having the potential to impact on the downstream pearl mussel. The Recommended Certificate of Authorisation (RCoA) states that the certificate of authorisation holder shall, within six months, carry out an ecological assessment of the impact of the discharge(s) from the waste water works on *Margaritifera margaritifera* (the freshwater pearl mussel) in consultation with the National Parks and Wildlife Service (NPWS). Having regard

to the results of the assessment the certificate of authorisation holder, shall within six months thereafter, implement the recommendations in the assessment report.

The receiving water has been identified as being less than good status (Biological Q value <4). It is acknowledged that the discharge(s) from the agglomeration may not be the only cause of the waterbody being less than good status. There is also red dot site (based on the EPA Biological Quality Rating System, Q-value) downstream of the discharge(s) from the agglomeration. It is acknowledged that the discharge(s) from the agglomeration may not be the only cause of the red dot site. The RCoA states that within six months the authorisation holder shall identify appropriate improvements to the wastewater works, including a waste water treatment system necessary to ensure all discharge(s) from the agglomeration contribute towards achieving at least good status in accordance with the European Communities Environmental Objectives (Surface Waters) Regulations 2009 and/or the European Communities Environmental Objectives (Groundwater) Regulations 2010.

The certificate of authorisation applicant was required to complete a screening of the potential impact of the discharge(s) from the agglomeration on the designated European Site(s) downstream of the agglomeration. The certificate of authorisation applicant carried out a screening which identified that the discharge(s) was likely to have a significant impact on a European Site and therefore it was necessary to complete an appropriate assessment.

The appropriate assessment indicated that there may be a potential impact on the designated European Site, River Blackwater (Cork/Waterford) SAC (Site Code: 2170), downstream of the confluence with the Finnow (Ballyclogh) Stream into which the discharge from the agglomeration outfalls. In particular, the contribution of the discharge, in combination with other activities within the catchment, to nutrient enrichment of the Munster Blackwater catchment may have implications for the qualifying species: atlantic salmon (*Salmo salar*), freshwater pearl mussel (*Margaritifera margaritifera*), brook lamprey (*Lampetra planeri*), river lamprey (*L. fluviatilis*) and white-clawed crayfish (*Austropotamobius pallipes*). Indirect impacts on otter (*Lutra lutra*) populations may arise as a consequence; though at present populations remain widely distributed. The Munster Blackwater catchment is the largest freshwater pearl mussel catchment in Ireland.

Cecilstown WWTP discharges secondary treated effluent to the Finnow Stream approximately 6km upstream of the River Blackwater River SAC. The stream enters the Munster Blackwater River just upstream of the known high concentration of pearl mussel populations upstream and downstream of Mallow town. It is noted that the receiving water, the Finnow (Ballyclogh) Stream, is assigned 'Poor' status under the Water Framework Directive. The most recent EPA monitoring results for the Finnow Stream indicate a quality rating of Q3-4 ('Moderate') status in 2009 just upstream of the Blackwater confluence. Notably, white-clawed crayfish were recorded at this location for the first time in 2009. According to the appropriate assessment, given that there is currently no nutrient removal at the Cecilstown WWTP, this agglomeration is likely to be contributing to elevated levels of organic and inorganic eutrophying nutrients which enter the Blackwater River upstream of a large number of freshwater pearl mussel colonies.

Cecilstown WWTP is one of eighteen WWTPs within the Munster Blackwater catchment which were deemed to have a significant adverse effect on the pearl mussel or its habitat in the *Freshwater Pearl Mussel - Munster Blackwater Sub-Basin Management Plan* (Second Draft, NS2 2010). All eighteen of these WWTPs have been prioritised for investigation

and/or upgrade with the aim of reducing overall nutrient, organic and sediment loads in the Munster Blackwater catchment. The Water Services Authority has confirmed that it intends to incorporate nutrient (phosphorus) removal into the treatment process at Cecilstown WWTP, by installing a ferric sulphate dosing unit, before the end of 2011.

Condition 1.6 requires that the certificate of authorisation holder shall maintain such available capacity within the waste water works as is necessary to ensure that there is no environmental risk posed to the receiving water environment as a result of the discharge(s) and that the certificate of authorisation holder shall upgrade the waste water works where it determines that there is inadequate treatment capacity available. It is considered that subject to the mitigation measures proposed the discharges(s) are not likely to have a significant impact, in terms of maintaining favourable conservation status of the qualifying interests, on the designated European Site.

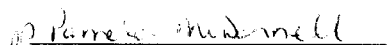
The RCoA states that within six months the authorisation holder shall identify appropriate improvements to the wastewater works, including a waste water treatment system necessary to ensure all discharge(s) from the agglomeration contribute towards achieving at least good¹ status in accordance with the European Communities Environmental Objectives (Surface Waters) Regulations 2009 and/or the European Communities Environmental Objectives (Groundwater) Regulations 2010 and to contribute towards achieving the ecological quality targets prescribed under the European Communities Environmental Objectives (Freshwater Pearl Mussel) Regulations 2009 (Fourth Schedule of S.I. No. 296 of 2009).

The discharge(s) from the agglomeration are considered not likely to have a significant impact on the receiving waterbody subject to the Certificate of Authorisation Holder complying with the conditions of the RCoA.

Recommendation

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

Signed



Yvonne English

Inspector

Office of Climate, Licensing and Resource Use

¹High status will be required for Pearl Mussel Regulations sites as identified in the First Schedule of The European Communities Environmental Objectives (Freshwater Pearl Mussel) Regulations 2009, S.I. No. 296 of 2009. Furthermore, the Regulations specify that waters classified as less than good must be restored to **at least good status** within a prescribed timeframe.