Attachment A.1

Non-Technical Summary – Kilkee Agglomeration

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Version 3 Dated May 2013

1 Introduction

Clare County Council is required to make an application to the Environmental Protection Agency (EPA) for a licence to discharge treated wastewater from the Kilkee agglomeration, in accordance with Article 5 of the Wastewater Discharge (Authorisation) Regulations, 2007 as amended in 2010 (S.I. No. 684 of 2007 and S.I. 231 of 2010). The application form and its attachments are completed as required by the EPA in accordance with guidance notes provided.

2 **Description of Kilkee**

Kilkee is situated along the Atlantic coast approximately 13 kilometres to the north-west of Kilrush on the N67. Due to its location there are significant seasonal variations in flow to the Kilkee sewer network. Kilkee experienced an increase in housing development during the mid-noughties, consisting mainly of holiday homes and caravan parks, hotels and restaurants. A map indicating an aerial view of the agglomeration catchment for the Kilkee sewer network, the location of the pump station in Victoria Park and the location of the primary discharge is provided as Attachment Map B.1 Kilkee Agglomeration V.2_April 2013.

3 Wastewater sources

Domestic wastewater is the main component of discharge to the Kilkee sewerage network with some commercial flows from tourist facilities, i.e. holiday homes and caravan parks, restaurants, hotels, etc. There are no industrial sector discharges to the network. The population equivalent (p.e.) being served by the Kilkee agglomeration is 6000. This figure is the design p.e. for the proposed waste water treatment plant (WWTP) which was amended in 2011 to reflect the limited development of Kilkee and the now expected p.e. in the short to medium term, taking account of the economic climate. The estimated summer loading is 4515 p.e. and the winter loading is 1503 p.e. and the winter loading is 1503 p.e. Wastewater Treatment

There is no wastewater treatment associated with the Kilkee agglomeration at present rather

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the sewer network in Kilkee comprises of a combined system that flows by gravity to two storage tanks situated in Victoria Park and is then pumped to a sea outfall at Intrinsic Bay approximately 2km to the south. Proposals are in place for the construction of a new Wastewater Treatment Plant (WWTP), however neither the location nor the design of the new plant have yet been finalised. Clare County Council hopes to progress Sections (II) to (V) of the scheme, i.e. the Detailed Design and Contract Stage and the Construction Phase of the scheme, with a projected completion date of September 2016. This date is only attainable if both approval from the Department of Environment, Community and Local Government (DECLG) and funding is available.

5 Impact of emissions from the Sewer network on receiving waters

The impact of discharges from the Kilkee sewer network on the receiving waters is considered under a number of headings:

- Description of receiving waters
- Statutory Designations of the Receiving Waters
- Assimilative capacity of the receiving waters
- Total maximum nutrient load discharging to receiving waters
- Monitoring undertaken on receiving waters
- Impact of storm overflows

5.1 Description of receiving waters

The discharge from the Kilkee agglomeration drains to the coastal waters the Shannon Plume Code: IE_SH_070_0000. The waterbody covers an area of $379 \, \mathrm{km}^2$ and stretches from the mouth of the Shannon estuary in the south, along the County Clare coastline to Black Head to the north. A quality status has not been assigned to this waterbody, however the Water Framework Directive (WFD) 2000/60/EC, includes the objective of attaining good status in water bodies that are of lesser status and retaining good status or better where such status exists.

5.2 Statutory Designations of the receiving Waters

- (i) The discharge from the Kilkee agglomeration is to coastal waters within the Kilkee Reefs Special Area of Conservation (SAC) Site Code: 002264. An appropriate assessment (AA) with respect to the Kilkee agglomeration was undertaken, in accordance with the Wastewater Discharge Authorisation Note on Appropriate Assessments as issued by the EPA, and submitted to the EPA in November 2010.
- (ii) The nearest bathing water, designated in accordance with Regulation 4 of the Quality of Bathing Water Regulations, 2008, is Kilkee beach, which is situated in Moore Bay. A Bathing water profile for the beach has been established and the bathing area has been assessed as Good status. Clare County Council monitors the bathing waters during the summer period. Results of monitoring indicate compliance with the Quality of Bathing Water Regulations, 2008. A copy of the monitoring results is provided as Attachment F.1.2 to the application.
- (iii) The receiving waterbody is not designated as an warea for the abstraction of water intended for human consumption.
- (iv) The receiving waterbody is not designated as an area for the protection of economically significant aquatic species (fish, shellfish). While it is noted that there are three designated shellfish production areas in proximity to Kilkee, i.e. Poulnasharry Bay, Carrigaholt Bay and Rinevella Bay, all three areas bound onto the Mouth of the Shannon Estuary and given their location it is considered that there is no impact on quality of the shellfish waters from the discharge of wastewaters from the Kilkee agglomeration.
- (v) The receiving waterbody is not designated as an area which is nutrient sensitive.

6 Assimilative capacity of the Receiving Waters

The outfall from the Kilkee agglomeration is to coastal waters. The Detailed Design and Contract Stage of the development will include carrying out an AA and an Environmental Impact statement (EIS), which will address the assimilative capacity of the receiving waters, the mixing zone and dispersion of the effluent emission.

7 Total maximum nutrient load discharging to receiving waters

This issue will be addressed as part of the Detailed Design and Contract Stage of the development of the scheme to be included in the AA and an EIS assessment of the effluent emission on the receiving waterbody.

8 Monitoring undertaken on receiving waters

Clare County Council monitors the bathing waters at Kilkee beach during the summer period. Results of monitoring indicate compliance with the Quality of Bathing Water Regulations, 2008. A copy of the monitoring results is provided as Attachment F.1.2 to the application.

9 Impact of storm overflows

Emergency overflows may occur to Victoria stream from discharge points SW2 and SW3, located beside Victoria Pump Station. These discharge points were inadvertently labelled as secondary discharges in the application. Normal operations at the pump station, even during heavy rainfall does not result in overflow. The configuration of the pump station is such that a stormwater overflow will only occur following long periods of very heavy rainfall together with pump dysfunction and power outages.

The Victoria stream discharges onto the Kilkee Beach and during the bathing season, the stream is blocked and pumped to coastal waters discharging at SW1. In the event of long periods of very heavy rainfall, the river is allowed to drain onto the beach, however both waste waters and storm waters are kept separate from the river and continue to discharge via SW1. Emergency overflow discharges from either SW2 or SW3 to Victoria Stream will only occur if there is a period of very heavy rainfall together with both foul and storm pump dysfunction and/or a power outage and backup generator failure. There is no record of this occurring in the past.

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