

Roscommon County Council

Monksland Wastewater Discharge Licence Application

Response to **Article 4** of notice in accordance with Regulation 18(3)(b) of the Waste Water Discharge (Authorisation) Regulations 2007

Confirm that Danehill, Crannagh and Tuam Road Pumping Station have no overflow facilities. Provide details of what happens in the event of an extreme weather event or equipment malfunction.

In response to the abovementioned notice and following the 4th revision to the Wastewater Discharge (Authorisation) Application Form to section C.1 on 1st March 2008 requesting information with regard to pumping stations we submit the following additional information.

The Monksland sewerage scheme includes 6 no. pumping stations. All of these pumping stations have some form of emergency overflow. The Daneshill, Crannagh and Tuam Road pumping stations do not have formal overflow structures but have the ability to overtop to surface water drains in the event of an emergency.

A map showing the location of each pumping station and discharge point (Drawing 23) is included with this response.

In response to this query, a detailed analysis of SCADA records from the Wastewater Treatment Works was conducted. By checking the high water levels in the wet well of each pump sump over a 1 year period it has been possible to identify the frequency and cause of overflows. There is only one overflow that has been activated more than once.

Bellanamullia is now effectively acting as a storm water overflow. Evidence suggests that there is some infiltration of storm water in Bellanamullia originating from outside the main network and as a result this pumping station overflows more frequently than the others.

Information on the frequency of this overflow is given in Article 7 of this response.

Each of the pumping stations has 2 no. foul pumps operating on a duty standby basis. In the event of failure of a duty pump where there is no standby or in the event of mains failure or any malfunction of ancillary equipment an emergency dial out system is place at the works (telemetry) which notifies the caretaker and the assistant caretaker of the failure via text message.

Failure of both pumps or power failure is a high level priority alarm and requires immediate call out.

The caretaker must proceed to the source of the problem and can then establish the cause of the malfunction. In the event of a routine pump malfunction such as a blockage the caretaker will reactivate the duty pump.

Measures are also in place to prevent or reduce such occurrences. The duty caretaker is required to visit each pumping station twice per week to ensure the pumps are working satisfactorily and at least once per month the caretaker lift the pumps and clear any ragging, debris and other blockages.

From SCADA records it was observed that, for the year July 2007 – July 2008 the Cushlea (SW4) emergency overflow to the River Cross was activated once and the Daneshill pumping station, which overflows to a surface water drain, overflowed once. Both of these overflows were due to pump malfunction. No evidence of overflowing was observed for the Summerhill (SW3) or Crannagh (overtop surface water drain) pumping stations.

Each of the 6 pumping stations has 2 no. foul sewage pumps operating on a duty/standby basis.

Tuam Road pumping station has recently been replaced by a substantially larger pumping station close to the original location. This pumping station now has a very substantial holding tank and there is no evidence of it overflowing since it came into operation in recent months.

The capacities of each pump station are given below;

<i>Station</i>	<i>Capacity</i>	<i>Frequency of Overflows/Year</i>
• Bellanamullia (SW1)	7 l/s	21
• Summerhill (SW2)	13.5 l/s	0
• Cushlea (SW3)	46 l/s	1
• Tuam Road	6 l/s	0
• Daneshill	6 l/s	1
• Crannagh	6 l/s	0

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