

A.1 Non-Technical Summary

1. Waste Water Discharge Licence /Background

Mayo County Council, Aras an Chontae, Castlebar, County Mayo is making an Application, to the Environmental Protection Agency (EPA) for a Waste Water Discharge Licence, for the Belcarra Waste Water Treatment Plant (WWTP) & Agglomeration, in compliance with the Waste Water Discharge (Authorisation) Regulations 2007 (S.I. No. 684 of 2007).

Under Schedule 2 of the above regulations, the prescribed date for submission of Waste Water Discharge Licence Applications for agglomerations (with discharges with a population equivalent of 500 PE to 1,000 PE) is 22nd June 2009. The waste water works at Belcarra falls under this category, presently having an agglomeration with a population equivalent of 500 PE.

The scheme was built in 2001 and was financed by funding from DoEHLG under the Small Schemes Programme and Mayo County Council

2. Description Of Belcarra Waste Water Works / Sewerage scheme

The Waste Water Treatment Plant in Belcarra has an associated collection network consisting of foul sewers with 1 No. pumping stations and no storm overflows

The Belcarra WWTP with a capacity of 500 PE, is currently being operated by Mayo County Council. Treated Effluent from the plant is discharged to the Manulla River (Primary Discharge Point).

The WWTP is based on the attached growth process and designed to treat sewage from a population equivalent of 500 PE.

The Waste Water Treatment process takes place in a package plant consisting of the following;

- Influent sampling point
- Influent chamber
- Primary settlement tank
- Rotating biological discs
- Sludge storage in primary settlement tank
- Sludge return to sludge holding area
- Final effluent sampling point

The existing pipe network in Belcarra consists mostly of 225mm diameter pipe collection system. The majority of the town gravitates to a pumping station located in the middle of the village. The sewage is then pumped across the Manulla River into a chamber and gravitates to the treatment plant. A small part of the town gravitates directly to the treatment plant.

3. Sources of Emissions

Emissions from the WWTP are discharged to the Manulla River through an outfall labelled SW1 (P) (120027E, 284,563N). This is the primary discharge point.

There is one secondary discharge point which is an emergency overflow from the pumping station SW2 (119982E, 284410N).

The pumping station has been designed with a 2-hour emergency volume of storage. This is to give sufficient time for repair to the pumping plant or power supply.

4. Nature and Quantities of Foreseeable Emissions

The wastewater treatment works is designed to treat the wastewater treatment to the standards required by the Urban Wastewater Treatment Regulations. i.e. BOD 25mg/L, COD 125mg/L and SS 35mg/L

The average volume currently discharged from the municipal effluent stream of the treatment plant is estimated at 90m³/day (400 PE). This is equivalent to an average discharge of 2.25 kg BOD/DAY, 3.15kg Suspended Solids.

It is expected that the PE being treated by the Belcarra Waste Water Discharge municipal effluent will increase to 500 PE in the medium term, which would mean an increase in the average discharge from the treatment to 113m³/day.

All discharges take place to the Manulla River which flows into Lough Conn. The Manulla River is a designated salmonid water.

Results were obtained from the EPA for sampling carried out downstream of the discharge point.

5. Technology for Prevention or Reduction of Emissions

Emissions from the WWTP are monitored and the treatment process is adjusted to maximise the efficiency of the plant in removing any pollutants. The process, as has already been summarised above, is successful in removing BOD, and suspended solids from the final effluent which results in a reduction of harmful emissions from the treatment works.

6. Further Measures Planned to Eliminate or Reduce Emissions

There are no immediate proposals.

7. Supervision of works

The WWTP is visited by an operative on a regular basis to monitor plant operation and maintenance.

8. Measures planned to monitor emissions to the environment

Sampling currently takes place at the wastewater treatment works final effluent sampling point in accordance with the provisions of the Urban Wastewater Treatment Regulations. This will continue to be the case.

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