ultraviolet disinfection, before being discharged into the Dublin Bay.

Fermoy, Co. Cork

The population of Fermoy has grown with the most recent census figures showing that Fermoy has a population in excess of 5,984. The WWTP is designed for a PE of 20,000 and BOD loading of 1,200 Kg/day. The wastewater is collected in a partially combined foul and separated foul sewage drainage network. In order to cope with flows above 2.3 DWF, storm storage has been provided at the WWTP. In the event that the storm water holding tanks are filled, the storm water tanks are operated as a pre-clarification tank without sludge removal. The overflow from the storm water storage tank is connected to the final effluent outlet pipe, which discharges into the Blackwater River.

Fig 2. Overview of Fermoy WWTP

Charleville, Co. Cork

Charleville WWTP was initially designed to take effluent from a nearby industrial plant and its current capacity PE is 15,000 with an agglomeration population of 2,984. Following screening effluent passes through to a splitting chamber, which is divided into two oxidation ditches allowing two separate process streams. This enables each stream to be operated in isolation allowing continuous treatment of wastewater. As there is currently no industrial loading to the WWTP only one stream operates at a given time. In each oxidation ditch 7 m rotors are used to ensure sludge remains suspended at all times. From these ditches the flow passes to a thickener and dewatering plant with the sludge removed weekly.

Fig 3. Overview of oxidation ditches at Charleville WWTP

Bandon, Co. Cork

Bandon WWTP is located southwest of Cork City. The WWTP was upgraded in 1993 and designed to treat a PE of 20,000. Inlet flows at the WWTP receive secondary treatment, which is carried out in an activated sludge treatment process that operates in parallel with an upgraded percolating filter system. The treated effluent discharged to the River Bandon.

Fig 4. Overview of Bandon WWTP, Co. Cork

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