REVITALISED WASTEWATER TREATMENT

McGILL

Asset Sweating at Ravernet WWTW

Optimisation initiated in the McGill Distributor reduces the opportunity cost of extensive CAPEX investment at the Ravernet WWTW.

Secondary and Tertiary Treatment at Ravernet WWTW

Works

Operating to a Registered Discharge Standard of 40:60:10 (BOD; SS; NH_4N), the Ravernet WWTW employs a three stage process in the treatment of a 638PE load.

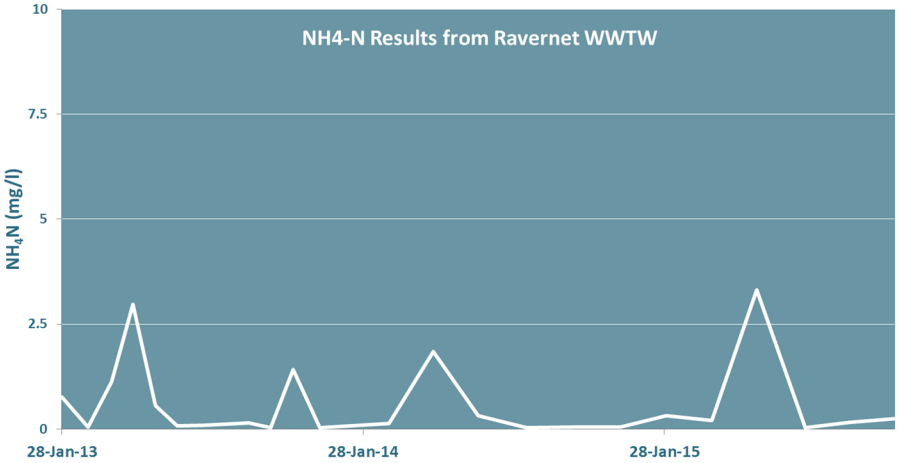
Based in a conventionally designed wastewater treatment process, NIW have undertaken a programme of optimisation at these works through the retrofit of, and expansion from, existing assets. Key alterations in this programme include the installation of the McGill Distributor, replacement of trickling filter media with Blast Furnace Slag and, most recently, provision of a final polishing tertiary wastewater treatment plant.

Impact

In optimising these conventional works around the McGill Distributor, NI Water now has within its portfolio a wastewater treatment works producing high quality effluent, without excessive maintenance requirements, energy costs nor financial implication from extensive capital works.

Results

The effective nature of this three stage treatment is seen in the highly polished final effluent, with NH_4N results well below 50% of the compliance target.



Ravernet WWTW NH_4N results 2013 through 2015[1]

[1] Data Sourced from Northern Ireland Environment Agency