

Case Study



Limerick County Golf & Country Club: Wastewater Treatment Plant Assessment

AWN Consulting were commissioned by Limerick County Golf and Country Club to provide consultancy advice in relation to the on-site wastewater treatment plant (WWTP) at the golf club. Due to problems with the WWTP, primary treatment effluent was being tankered off-site at considerable cost.

AWN conducted a site visit and carried out wastewater and effluent sampling and flow monitoring. The monitoring results were reviewed and several issues were identified:

- Infiltration of surface/groundwater to the sewer network:
- Clogging of distribution pipes due to use of inappropriate pipework;
- Unsuitable location of the percolation area in a low-lying area adjacent to surface water drainage ditches;
- Water-logging of the percolation area due to natural drainage and the presence of heavy clay soil.

AWN assessed several options for ameliorating the wastewater treatment issue including construction of a rising main to Limerick Main Drainage Scheme.

on-site treatment of wastewater and upgrading of percolation area/construction of an alternative percolation area, on-site treatment and direct discharge of effluent to the adjacent ditch and use of treated wastewater effluent for irrigation of the golf course.

Short term environmentally acceptable and cost effective recommendations made by AWN include:

- Remediation of the sewer network to exclude surface/groundwater infiltration;
- Continuing wastewater treatment on-site and construction of a new percolation area.

In the long term, it was recommended that a detailed study be commissioned on the feasibility of using treated wastewater effluent for irrigation and of using land comprising the driving range as a percolation area. It was also recommended that possible constraints of rising main construction on future development be assessed as well as potential septicity problems associated with operating a rising main below capacity.