



# alpha bio

WASTEWATER INNOVATION

## Application of the bioaugmentation technology and excess sludge management in the Wastewater Treatment Plant (WWTP) of Zakynthos island

The Wastewater Treatment Plant (WWTP) of Zakynthos island has been designed for the treatment of municipal wastewater, corresponding to 50,000 Population Equivalent. Due to the touristic profile of the island and the consequent seasonal population increase during the summer months, but also the significant increase of the hydraulic load due to the rainwater that ends up in the sewerage network during the winter months, the stability of the plant performance often becomes challenging. The application of the bioaugmentation technology in the WWTP of Zakynthos island, aims mainly at reducing the surplus dewatered sludge by at least 40% but also in the overall management (collection, transportation and disposal) of the remaining excess sludge. Finally, additional benefits from the application of the method are the improvement and stable operation of the WWTP with regard to the changes of the incoming pollutant and hydraulic load, as well as, the odor reduction in the septic wastewater reception stage.

