



# alpha bio

WASTEWATER INNOVATION



## AQUILA ELOUNDA VILLAGE” – Hotel WWTP in Lasithi, Crete island

The hotel complex "AQUILA ELOUNDA VILLAGE" has a wastewater treatment plant (WWTP) with a capacity of 550 beds. The main goal of the WWTP is the treatment of wastewater in an extremely wide range of hydraulic and pollutant loads. In addition, the management of the surplus sludge production and disposal entails a significant cost to the plant's operating company. Thus, the main goal of the bioaugmentation technology was the reduction of excess sludge, which was achieved at a rate of more than 75%. Furthermore, through the application of bioaugmentation, significant improvement was observed in all control parameters of the plant (BOD<sub>5</sub>, COD, TSS TN, TP). As a result, the final effluent meets the regulation limits for reuse in irrigation applications. In addition, the application resulted in a reduction of energy consumption and consequently in the corresponding operating costs, by about 15%. Finally, great amelioration was observed considering the reduction of odor emissions at the WWTP's surroundings.

