

A luxury hotel situated on the cliffs overlooking Soar Mill Cove on the South Devon Coast near to a Sight of Special Scientific Interest (SSSI) and National Trust Area.

Various floras within the grounds and surrounding area comprise of endangered species including colonies of shore dock, (*Rumex Rupestris*) alongside the nearby stream and the rare long-headed clover (*Trifolium Incarnatum Molinerii*). The shore dock *Rumex Rupestris* is particularly susceptible to competition from the Hottentot Bramble (*Carpobrotus edulis*) and other invasive species. Its global status is vulnerable.

Treated effluent discharges from the hotel to the stream achieving a quality better than 10 mg/l BOD, 15 mg/l SS, 1 mg/l NH₃-N. The system allows control of total nitrogen (TN) and phosphorus (P) nutrient concentrations which can be altered to meet future revised requirements to limit growth of competing flora. Again, being a popular tourist hotel, flows are subjected to sudden high seasonal peaks.

The Solution: Bio-Bubble Advanced Aeration

Bio-Bubble Advanced Aeration waste water treatment has previously and very successfully been applied to various sensitive discharge applications throughout the UK. It is highly effective at processing waste water flows to extremely high standards, meeting compliance with the most stringent Environment Agency prerequisites for effluent quality within environmentally sensitive locations.

Moreover, it is capable of doing this with outstanding reliability using far lower energy input than other systems and has previously demonstrated exceptional qualities of absorbing high shock loads following long periods of low inflow without failure concerns such as that experienced within tourism areas and hotels.