CASE STUDY

project:	Sludge Management Improvements for Meat Processor
product:	WTS 13-Biotifx and Process Consulting
industry:	Food & Beverage
location:	Tasmania

background

A poultry processing plant was encountering challenges in managing the sludge in its two effluent ponds. They were primarily looking for solutions to reduce the volume of sludge building up in the lagoons. The client engaged WTS to assist.

Approach

WTS's approach was multifaceted. We investigated the handling & removal of accumulated sludge as well as the digestion processes in the effluent lagoons to reduce the volume of sludge building up in the first place.

To address the sludge digestion issues, WTS' water treatment experts took several samples from the lagoons to the laboratory for further analyses & testing.

Poultry Processing Plant.

WTS solutions

WTS proposed improvements in dredge mobility aimed at enhancing the efficiency of sludge removal.

Lab tests indicated that a significant portion of the sludge was organically based. To combat this, a bioaugmentation programme using WTS 13-Biotifx was recommended. This bioaugmentation process has demonstrated promising results in breaking down biomass, with a track record of achieving 50% reductions in similar scenarios.

The organic biomass present in Pond 1 was proven to be highly responsive to the application of WTS 13-Biotifx, resulting in effective sludge reduction. The bioaugmentation process not only liberated sludge from Pond 1 but also successfully dissipated this liberated component. Reports from the client indicated that there was no discernible increase in sludge build-up that occurred in Pond 2 during WTS 13-Biotifx dosing.

Turbid influent into one of the lagoons

results and benefits

Effectiveness. Achieves effective sludge reduction through bioaugmentation.

Technical Support. Expert advice and consultation with all parties throughout the process by WTS.

Productivity. Positively impacts operational efficiency.

Sustainability. Contributes to the enhancement of overall environmental sustainability.