

CASE STUDY



project: Improving Solids Concentration from Decanter
product: Coagulant / Flocculant
industry: Manufacturing
location: NSW

background

A home improvement manufacturer in New South Wales struggled with poor solids settling and low sludge concentration from their decanter, leading to inefficiencies and high sludge disposal costs. Additionally, the treatment process failed to meet Sydney Water Corporation (SWC) Trade Waste discharge standards. To address these issues, the client turned to Water Treatment Services (WTS) for a chemistry-based solution. WTS conducted bench testing and a plant trial to enhance settling, optimise the decanter's performance and reduce operational costs.

solution

WTS took samples from the day tank and conducted a jar test using WTS coagulants and flocculants. After reviewing the results, the client approved a full-scale plant trial, allowing WTS to implement its treatment chemistry for enhanced performance.

By leveraging its expertise in water treatment chemistry, WTS delivered a targeted, sustainable, and cost-effective solution for the client's trade waste management.

WTS Key Solutions

- Collected, analysed, and tested trade waste samples from the day tank.
- Conducted jar testing with various treatment chemistry combinations to determine the best solution.
- Ran a full-scale plant trial using WTS coagulants and flocculants for real-world validation.

results and benefits

- **Achieved Compliance:** Met Sydney Water Corporation (SWC) Trade Waste discharge standards.
- **Improved Settling:** WTS coagulants and flocculants enhanced solids settleability, optimising system performance.
- **Higher Sludge Concentration:** The decanter produced sludge with a higher solids concentration, improving efficiency.
- **Reduced Costs:** Lowered sludge disposal expenses with better solid-liquid separation and higher solids retention.



Settling tank on client site



Decanter on client site