

RIVER SEDIMENTS, WATER TREATMENT AND MANAGEMENT



Overview

The Stabilisation Optimisation Study (SOS) was a trial for the treatment of contaminated sediments from the South Arm of the Hunter River. During the trial approximately 2000m³ of sediment was dredged from the river, dewatered and stabilised using cement under a DECC Specific Immobilisation Approval. Treated water was suitable for drinking water guidelines. Designed, manufactured, installed and commissioned by SAS Water Solutions in conjunction with Enviropacific Services.

Summary

- Treatment of 800kL of heavily contaminated river water
- Five stage treatment process including oil water separation, chemical treatment, clarification, sand filtration, GAC polishing
- Pilot plant treatment rates of 60m³/day
- Mobile plant contained on a 6 metre shipping rack. Establishment time – 4 hours.
- Compact, transportable, easily operated.
- Source – river sediment from former steelworks site, treated water suitable for discharge to river.
- Processed water satisfied drinking water guidelines.

Client: Daracon
Engineering/CH2MHill

Location: Hunter River
Sediments, Newcastle, NSW

Contaminants:

- PAHs
- TPHs
- BTEX
- Heavy Metals
- Cyanide
- Ammonia