

COMPACT EASY TO BUILD SOLUTION FOR LIHIR ISLAND STP, PAPUA NEW GUINEA

CASE STUDY



EPCO Australia has a long history in providing packaged sewage treatment solutions to clients in PNG, with over 30 installations in that market.

Lihir Island STP was built in 2012 with a design population equivalent of 2000.

The treatment system included:

- Equalisation Tanks with mixing
- Fine Screening for solids removal
- Roadtrain® Aerobic Reactor
- Secondary Clarification (HeadMax® suction head)
- Class A (100 KLD for fire fighting)
- Disinfection with Chlorine
- Sludge Drying Beds
- Wet weather storage
- Controls and SCADA



To facilitate site installation the entire structure of the activated sludge process was fabricated using the Roadtrain® bolted design.

The Roadtrain® with integrated secondary clarification reduces the footprint of the treatment plant and reduces site construction costs.

A HeadMax® Clarifier was used for the secondary clarification process, keeping all of the key process equipment in-house.

Site installation works and civil construction was carried out locally by PNG companies under the supervision of Hydroflux Epco. The process design was provided by Simmonds and Bristow.

Item	Value
Capacity	2000 EP
Process	Extended aeration
Capacity	600 m3/d
BOD	<20 mg/L
TSS	<30 mg/L
TN	<20 mg/L
Faecal Coliforms	100 cfu/100mL
Tank	Bolted Steel