



# Capability Statement

## West Coast Small Harbours Sediment Survey

Client: Aurecon



### REQUIREMENTS

- To investigate the sediment composition and levels of contaminants within targeted dredge areas at three harbours (St Helena Bay, Laaipek and Lambert's Bay) in order to determine whether the dredge material can be safely disposed of at sea.
- The London Protocol regulates the disposal of dredged sediments and other waste materials in the marine environment. This protocol requires the screening of target dredge sediments for contaminants of concern, to determine their suitability for offshore disposal. The screening process investigates the sediment constituents and their potential effects on the environment.

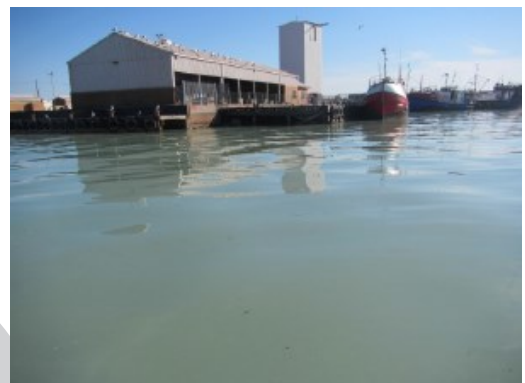
### WORK DONE

- Collection of sediment samples in several sampling sites in all three harbours using a sediment grab.
- Samples were analysed for sediment particle size distribution (PSA), trace metals, total organic carbon content and the presence of pesticides.
- A tripod drop camera was used to identify the biological features in all three harbours.

- Results were compared against the South African National Action list for the screening of dredged sediment disposal values and confirmed if sediments were safe to be disposed of.

### OUTCOMES:

Lwandle produced a detailed data report compiling the results of all the analyses performed on the sediments in all of the sites in all three harbours. The results were compared to national action thresholds to determine if they were safe to be dredged and disposed of at sea. Lwandle also identified disposal site (receiving environment) at each of the three harbours in order to inform the dredge disposal permit application.



**“Target dredge area and disposal site characterisation in three West Coast harbours”**