



# Capability Statement

## Assessment and Monitoring of Gas Import Construction

Client: ERM, Sunrise Energy & Basil Read



### REQUIREMENTS

- Assessment of the potential impacts on the marine ecology of Saldanha Bay/Langebaan associated with the construction and operations of LPG terminals for gas imports.
- Environmental monitoring of turbidity levels in and around Saldanha Bay during the proposed dredging operations linked to the upgrade of the Maintenance Quay at the Port of Saldanha.

### WORK DONE

- Assessment of the impacts associated with construction and operations of LPG on the marine ecology in Saldanha Bay.
- A comprehensive sediment properties and macrofaunal distribution survey.
- Simulation modelling of the dredging induced turbidity plumes.
- Environmental monitoring of sediment and water quality characteristics at the port of Saldanha, which involved:
  - ⇒ Continuous monitoring of water quality in the area adjacent to the dredge area using two moored data buoys with real time data transmission

- ⇒ Real time integrated units deployed for the full duration of the dredging operation.
- ⇒ CTD profile dips undertaken in an around the dredge area to confirm level of water column stratification, and;
- ⇒ Continuation of the sediment monitoring programmes at the dredge area including monitoring of the distribution of sediment particle sizes, heavy metals and macrobenthos through grab sampling.

### OUTCOMES:

Lwandle provided good quality, robust data and reports to the clients which allowed for an efficient planning and execution of the project and compliance with the environmental management plan.



**“Environmental Assessments and Monitoring of Construction Projects for Gas Imports into Saldanha Bay”**