

Deep sea tailings placement

What is deep sea tailings placement?

- Deep sea tailings placement is an alternative to managing tailings in an on-land storage facility, and is being considered as an option for the Wafi-Golpu Project.
- Deep sea tailings placement involves transporting tailings from the mine site via a pipeline to the coast for discharging into the deep ocean.
- Once discharged tailings slurry flows down the seabed slope as a coherent “density current”.
- Tailings solids accumulate at the base of the slope (usually deeper than one kilometre beneath the surface).
- Misima, Lihir, Simberi, Ramu have been successfully permitted for deep sea tailings placement systems and Woodlark is currently being considered.

Essential for safe engineering of deep sea tailings placement

- Deep sea near to the coast.
Seabed sloping steeply into deep water – at least 10-12° slope.
- Deep water at base of steep seabed (more than 1 km).
- No strong upwelling.
- Pipeline outfall below surface mixing zone.
- These conditions do occur in PNG, especially on the north coast and islands.
- The objective of deep sea tailings placement is to avoid potential risks to the nearshore marine environment and coastal areas which are important for fishing and other marine resources.

