

Case Study

Progressive Closure Strategy for Olympic Dam's Evaporation Ponds

BHP

Olympic Dam, South Australia

> Background

Okane was engaged by BHP to review closure requirements, update tailings storage facility (TSF) closure designs, TSF closure trials and develop closure options and trials for the evaporation ponds at Olympic Dam, one of the world's most significant deposits of copper, gold, silver and uranium. The tailings are a fine, low pH material with low levels of radioactivity and high metals. The EP precipitate is a hypersaline, low pH, metal laden, thixotropic material.

> Approach

Various workshops were held to define potential challenges and constraints, and to identify potential and probably implementation risks. Okane's deliverables included preliminary TSF closure designs, TSF closure trial designs, nine EP closure strategy alternatives, an EP Test Work and Field Trial program with supporting drawings, material take-offs, and capital and operational cost estimates.

> Client Benefit

Okane's work was used to update the Olympic Dam closure cost estimates and will be used to demonstrate progressive rehabilitation and closure planning is occurring at site, well in advance of end of mine life.

“We develop closure strategy and accurate cost estimates demonstrating the value of progressive closure.”

**Integrated Mine Closure
and Relinquishment Solutions**



(2020). Olympic Dam Mine. Mines and Metals.

