

Case Study

Removing Closure Liability Through Optimized WRD Construction

Open Pit Goldmine
Usak Province, Turkey

> Background

Okane's Integrated Closure Planning service was implemented in a targeted study that considered construction methodology and final landform design of two mine waste stockpiles at a Gold Mine in Turkey. Modelling, as well as historic data captured from the operation suggested that a significant acid treatment cost could be expected as the mine progressed, with these costs potentially extending well beyond the extractive Life of Mine (LOM).

> Approach

A practical solution was developed that resulted in a significantly reduced acid generating potential, through progressive closure techniques and reduced lift heights for the operating dumps. These solutions were fully modelled and costed using a best-in-class mine planning package, that can be fully integrated with the site's LOM plan. The result was a practical, executable solution and associated work plan that the mine could implement in line with their current Life of Mine strategy.

> Client Benefit

The proposed construction method changes to the dump resulted in quantified increases to the mine's operating costs; however, this was outweighed by the significant reduction in long term acid treatment costs that would otherwise be realised.

“The net result of this study was proof that progressive reclamation is a real, tangible and financially viable method of reducing both closure risk, cost and associated liability for operating mines.”

Integrated Mine Closure
and Relinquishment Solutions

