Case Study: Mining

PROJECT DETAILS

Three new pipeline projects completed for Konkola Copper Mine

1. Installation of a 19,685lf Slurry Pipeline
2. Installation of 11,155lf Backfill Pipeline
3. Installation of 22,965lf Tailings Line

ALLIANCE PARTNER

Rare Group

COMPLETION DATES

2008-2010

Challenge

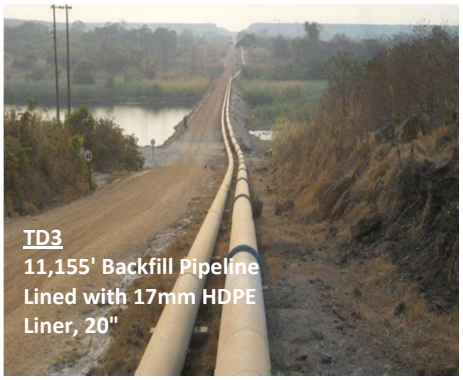
- To construct a cost effective polymer lined pipeline network in three stages to enable the client to reclaim and process copper tailings
- The largest Swagelining™ project undertaken in Zambia for Copper Mining
- The pipelines route through community areas and across mining property. Reliability and lifetime integrity in operations was a priority in system design
- All work was completed within a close working relationship with the Environmental Protection Agency.

Solution

- Three new carbon steel pipelines totalling 10 miles with sizes ranging from 20" to 24" diameter were fabricated and polymer lined with a PE100 liner using the Swagelining™ technique.
- Pipeline flanges were kept to an absolute minimum by designing longer pulls in order to minimize the potential for leakage during service life
- The Rare Group were responsible for all works on this project including civil engineering, steel pipe construction and polymer lining

Impact

- Utilizing Swagelining™ technology resulted in a significant reduction in the impact to the community and environment due to the speed of installation and the integrity of the constructed system
- Significant reduction in time frame to complete project over alternative methods of construction as pull lengths to 2,300 feet were achieved.
- Costs saving were achieved by Swagelining™ as the method of installation eliminated the need to construct flanged joints at 40 foot intervals
- Environmental Protection Agencies now recognize Swagelining™ as a proven construction system providing built in protection as a double containment capability for the pipeline



SWAGELINING™

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