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Can you highlight recent milestones SRK achieved?

2023 was characterized by fluctuations in commodity prices, which have had a significant impact on our clients' operations and, consequently, our business. Nevertheless, we grew our practice, particularly in Nevada, where we are heavily involved in some key projects. Among those are several operations that are transitioning from open pit to underground operations—a continuing trend we have observed over the last decade. These transitions present new challenges such as dewatering, changes in geochemistry, and the complexities of permitting. This shift requires us to rethink not just the mining methods but overall operational and permitting strategies.

What is a recent case study where SRK added value for a client in the Western USA?

We worked with several key clients in the Western US on long-term operational and project expansion services. For one, we helped to optimize throughput capacity for in situ leaching operations. Our design engineers collaborated closely with hydrogeologists to conduct detailed water balance analysis, which enabled us to optimize the size of the water management features on site. As a result, the client increased throughput without incurring significant additional operating or capital costs. Our integrated approach can deliver value to clients in a short time frame.

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How has climate change affected mining operations in the Western USA?

We increasingly acknowledge the need to factor extreme climatic events into our designs and operational plans. Regulatory agencies are also beginning to realize traditional storm return period designs may not be adequate for the long-term scenarios we encounter during mine closure. Closure is a perpetual concern; it is critical to incorporate potential larger storm events into our planning processes. The primary challenge we face is managing water effectively, especially considering the possibility of extended periods of extreme wetness or dryness that can disrupt established water balances. Our designs must now accommodate these extreme events, ensuring we can manage water flows and mitigate potential environmental impacts effectively.

What role does technology play in tailings management and monitoring?

Digital technologies are essential in tailings management and monitoring, particularly in the wake of increased scrutiny following several high-profile tailings failures. Even before the Global Industry Standard on Tailings Management (GISTM) was introduced, we were developing remote monitoring technologies for tailings impoundments. Over the past few years, we have seen significant advancements in this monitoring systems. For example, radar technologies that can detect

minor movements in tailings and embankments have been effectively utilized to ensure safety and stability.

What innovations in closure technology have emerged recently?

We have seen innovations in the materials and methodologies used for mine closure. As we have gained experience and data on the performance of closure systems, we are reevaluating the synthetic materials used. The longevity of these materials is critical, as they often have limited design lives. Our focus has been on developing cover systems that can effectively limit infiltration into mine waste while ensuring durability over the long term. We have been working on passive drainage management systems for over 30 years and are now analyzing their long-term performance. This led us to redesign some of these systems based on the data we collected, particularly regarding subsurface evaporation systems.

How does SRK assist clients with regulations?

We provide technical support to clients as they navigate the permitting process. While impact assessments are typically conducted by others, our long-standing relationships with regulatory agencies allow us to facilitate technical communication and understanding between clients and regulators. Our team includes high-level technical experts who can assist regulators in understanding complex site-specific information, helping clients to effectively address regulatory concerns without overwhelming them with unnecessary data collection.

What are SRK's objectives in the Western USA?

Our focus is on organic growth of our technical team, seeking to attract the right talent at the right time. We value our smaller, nimble structure, which allows us to concentrate on projects that align with our expertise and interests. This approach fosters a collaborative and enjoyable working environment, enabling us to maintain our culture and provide high-quality services to our clients. As we celebrate 50 years in the industry, we believe this strategy reinforces our commitment to providing tailored, innovative solutions rather than competing with larger consultancies. ■