Customer Success Story

Location: Chile

AMI RO technology used to convert mine waste into valuable resources

Applied Membranes addresses water-related challenges faced by the mining industry.

Challenge

In Chile, there are hundreds of tailings dumps with waste materials that are byproduct of mining operations. Many of the tailings are inactive or abandoned. These tailings contain toxic minerals such as arsenic, cyanide and lead.

A company in Chile is focused on recovering metals and rare earth elements from mine waste.

Committed to addressing environmental challenges from mining waste disposal, the company focuses on innovative and sustainable solutions to recover valuable metals from these wastes.

The company needed a reliable and durable RO system to filter impurities and produce high-quality water for its operations. The RO system needed to fit within specific footprint dimensions.

Solution

Applied Membranes engineered, built, and delivered a state-of-the-art **70 GPM (16 m3/h)** Reverse Osmosis (RO) system for the customer's application.

AMI RO system is designed to maximize metals recovery while minimizing environmental impact.

AMI skid-mounted system fit into the customer's compact footprint. The system is equipped with automatic and manual modes of operation in addition to remote monitoring capabilities.

Key Features:

- Booster pump
- Media filter
- Antiscalant
- Clean-in-place system
- Chemical injection system
- Programmable Logic Controller (PLC)

Results

AMI system provides high quality water for mining operations and human consumption.

Enhanced metal recovery: AMI RO system enables the extraction of a higher percentage of valuable metals, including copper and rare earths, from the mineral waste.

Local collaboration: Applied Membranes worked with local partners in Chile to facilitate a smooth installation process and strengthen community ties.

Service and support: Applied Membranes visited the installation site to provide additional support in collaboration with local partners.

Applied Membranes helped the customer to optimize system performance and trained operators to achieve the highest possible metal recovery rates while maintaining energy efficiency.

2450 Business Park Dr, Vista, CA 92081 | www.appliedmembranes.com | sales@appliedmembranes.com | 760-727-3711