

**OBJECTIVE**

Re-use of mine impacted water high in SO_4

TECHNOLOGY

Sulf-IX™

PLANT CAPACITY

600 m³/day

LOCATION

Arizona, USA

BQE WATER SCOPE

Process design, engineering review, commissioning, and ongoing technical support

Project Overview

BQE Water entered into a development agreement with a US based mining company to apply Sulf-IX™ technology on mine impacted water containing elevated levels of sulphate. The approach to water treatment taken by the mine owner focuses on transformation of the mine water from liability to value product.

A transformative approach involves reclaiming the mine water for re-use and generating clean, non-hazardous by-products or that may have value. By maximizing water recovery while eliminating liquid brine waste and the associated disposal costs, the life cycle costs are significantly reduced.

After a detailed technical evaluation and verification that Sulf-IX™ can treat mine water for re-use and produce only an inert by-product, the mine owner has concluded Sulf-IX™ is more cost-effective than alternative options for their purposes. Findings are being utilized in ongoing process demonstration and detailed assessment of life cycle costs.