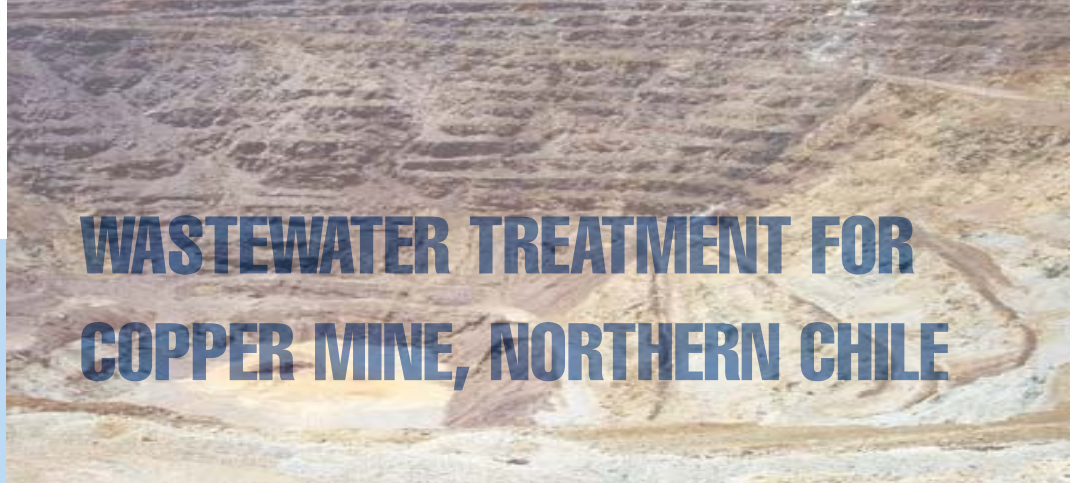




A Subsidiary of the RWL Water Group USA



# WASTEWATER TREATMENT FOR COPPER MINE, NORTHERN CHILE

## THE FACTS

**LOCATION:** Copper Mine, Northern Chile

**APPLICATION:** Wastewater Treatment

**DATE OF INSTALLATION:** JULY 2008

**PROBLEM:** Wastewater could not be reused in various applications.

**SOLUTION:** Provided a wastewater treatment system.

**CAPACITY:** 22,000 m<sup>3</sup> /day

**FOOTPRINT:** 65,000 m<sup>2</sup>

**CLIENT:** Cyprus Development Authority

## AEROMIX IS THE EXCLUSIVE SOURCE FOR NIROSOFT TURNKEY SOLUTIONS

- DESALINATION OF BRACKISH AND SEA WATER
- EFFLUENT RECLAMATION
- SUPPLY OF DRINKING WATER IN REMOTE LOCATIONS OR DISASTER AREAS
- DEMINERALIZED WATER
- WASTEWATER TREATMENT

## ABOUT AEROMIX

AEROMIX is a world leader in water and wastewater treatment equipment. AEROMIX offers full lines of treatment systems, aeration, equipment, and solar-powered equipment. Learn more by visiting [www.aeromix.com](http://www.aeromix.com).

## Challenge

The Collahuasi copper mine in northern Chile is the country's third-largest copper producer. Located in a harsh and ecologically fragile region, the mine is a zero-discharge operation, with much of its water being recycled. The mine required a treatment system to enable the wastewater to be reused in various applications.

## Solution

We undertook a turnkey project for the complete supply and installation of a wastewater treatment system, including commissioning and onsite training. The treated water is used to provide water for onsite process uses and wood lot irrigation.



## System Description

The wastewater treatment plant is comprised of several treatment stages to ensure the resultant effluent is suitable for reuse. The treatment stages included:

- **Sedimentation**—gravity settling of suspended solids
- **Flotation**—removal of colloidal and dispersed particles and materials
- **Media filtration**—filter out residual solids after flotation
- **Activated carbon**—removal of dissolved organic material
- **Ultrafiltration**—removal of residual suspended solids, colloidal and organic matter, and bacteria and viruses prior to RO desalination
- **Reverse osmosis**—removal of dissolved salts and heavy metals