

CASE STUDY CHILE

ARSENIC CONTAMINATION REMOVED BY TRUNZ WATER SYSTEMS

Location

Chile / Putre

Introduction

Chilen faces arsenic contamination in many areas. The solution by Trunz Water Systems removes arsenic, a widespread problem in northern Chile, below the limit value to make it safe for human consumption. In addition removes all bacteriological contamination with an integrated ultrafiltration system – all powered by renewable energy. Many successful installations and systems proof the concept: they are continuously operating for more than 3 years.

The systems treat the contaminated water to clean and safe drinking water every day for the surrounding communities of this remote region. Thanks to the long-term collaboration with our distribution partner SWS Chile, these installations provide a sustainable drinking water solution for remote communities along with reliable local service support by SWS Chile for ongoing maintenance of the installed equipment.

On-site conditions

Access to location	by car / up in the mountains
Ø amount of people served	up to 300 per installation
Water source	borehole
Common contamination in raw water	organic contamination and arsenic
Ø distance from source water to unit	approx. 20 meter
Ø water temperature	depending on season, Ø 0 - 5° C
Ø air temperature	depending on season, Ø -5 - 15° C
Site preparation work	depending on on-site infrastructure pipeworks, water tanks, housing protection



Technical layout

1 Water source
2 Solar direct pump system
3 Raw water tank
4 Solar Power Center TSPC (Solar Panel, Batteries, Inverter, Controller etc.)
5 Trunz Water Container (TWC) incl arsenic removal.
6 Water storage tank(s)
7 drinking water

