CASE STUDY

PROJECT	POTABLE WATER FOR COPPER MINE ACCOMMODATION CAMP
PRODUCT	Multimedia Filtration
INDUSTRY	Mining
LOCATION	Kazakhstan

BACKGROUND

The Bozshakol Copper Project, owned and operated by KAZ Minerals (formerly Kazakhmys), is the largest single copper mine development in Kazakhstan, and one of the largest undeveloped copper deposits in the world.

A Turkish construction company was engaged to construct the 1,200 man accommodation camp and associated facilities, which included the potable water treatment plant.

MAK Water had already been engaged to supply the process and potable water treatment plants for the Bozshakol Sulphide and Bozshakol Clay processing plants: the client had confidence in MAK Water's ability to supply a high quality potable water treatment plant that would comply with the project specifications.

SOLUTION

Multimedia filtration (MMF) plant to produce 330 m^3 per day of potable water for the 1,200 man accommodation camp.

CONTAINERISED FOR COLD CLIMATE

- Protection from harsh operating environment, with ambient design temperature -44.5°C to 39.9°C
- Duty/standby air conditioners, duty/standby electric air blower heaters and wall and ceiling insulation

POTABLE WATER TREATMENT PLANT

- 1 x auto-backwashing multimedia filter vessel
- 2 x auto-backwashing granular activated carbon filter vessels
- Cartridge filter for polishing
- Potable water tank recirculation and residual trim hypochlorite dosing and free chlorine monitoring
- Premium instrumentation package
- Fully automated for standalone operation

330 m^3/day containerised MMF plant loaded for transport to Kazakhstan

330 m^3/day containerised MMF plant ready for delivery to site

RESULTS AND BENEFITS

- **Plug and play.** Pre-tested, containerised design for fast and easy installation onsite.
- **Project compliance.** Dual language documentation (Russian and English). Obtained GOST-K certification. Complied with project specifications and preferred equipment.