CASE STUDY

PROJECT CHLORINATION PLANT FOR DEFENCE
PRODUCT Sodium Hypochlorite Disinfection Recirculated (SHDR)
INDUSTRY Defence
LOCATION Kunwarara, Queensland

BACKGROUND

The client, a civil construction company delivering works for the Australia Singapore Military Training Initiative (ASMTI), required a reliable potable water solution for the Australian Defence Force (ADF). The ADF needed a consistent supply of potable water that could be safely stored and maintained within specification. Without an onsite solution, the ADF would incur significant ongoing costs transporting potable water to site, while also increasing safety risks associated with vehicle movements during training exercises.

MAK Water was selected to design and manufacture a reliable solution to treat the source water, which required additional disinfection.

Our team worked closely with the client to design a fit for purpose solution that complies with the Australian Drinking Water Guidelines (ADWG).

SOLUTION

MAK Water delivered a tailored Sodium Hypochlorite Disinfection Recirculated (SHDR) unit capable of servicing the combined capacity of all three storage tanks, removing the need for multiple systems. The solution was engineered specifically for the site's demands, with robust construction suited to remote and challenging ADF environments, and full compliance with all project specifications.

MAK Water containerised SHDR unit

MAK WATER KEY SOLUTIONS

- Comprehensive documentation package issued prior to manufacture for end-user review.
- Preliminary general arrangement drawings provided upfront to support site planning to assist with tank pipework integration

RESULTS AND BENEFITS

- **Cost savings.** Reduces or eliminates the need to truck potable water to site, while ensuring water availability for training exercises.
- **Operational reliability.** Continuous monitoring provides consistent, safe disinfection while eliminating under- or overdosing risk.
- **Efficiency.** Simplifies chlorination management, reducing manual checks and freeing staff for higher-priority onsite tasks.
- **Sustainability.** Optimised chemical usage to improve environmental outcomes and reduces operational impact.

Containerised SHDR unit on site