

Case Study RO FMG – Camp 25A

FMG installed a 750 person camp to facilitate the upgrade of the mine rail system to two tracks from Port Hedland to Cloud Break and beyond.

ABCO Water Systems provided all water, wastewater and fire system infrastructure to this camp. The RO was provided as two separate systems.

Initially, it was to be a 500 person camp. A 225 kL per day plant was provided (500 persons at 350 l/p/d = 175 kL per day). This was upgraded with a 90 kL per day plant when the camp was increased to 750 person capacity. Total camp requirements were 750 persons at 350 l/p/d = 262,500 l/d. Total RO capacity provided = 225 + 90 = 315 kL/day.

Both raw and potable water tanks were ABCO galvanised steel tanks fitted with potable grade liners. All raw water was filtered through multimedia filters followed by bag filters to reduce particle size to less than 5 micron. All potable water was recirculated and chlorinated as and when required to maintain correct sterilisation at all times.

The pressure pump system was designed to handle the complete camp requirements. Three pumps were installed. Each pump sized to provide a minimum of 50% of the maximum instantaneous demand. All three pumps were fitted with variable speed drive and alternated in duty. This combination saved on power load under all normal operating conditions. No system outages were experienced during the life of this camp.



