



ANCALA
WATER SERVICES

CASE STUDY

AWS delivers solution to ensure water quality & compliance

01 The Project

AWS puts safety, quality and environmental compliance at the forefront of all the activities we undertake across the MoD estate. Along with ensuring the assets we maintain remain in compliance with the latest regulations.

Through our continued analysis and monitoring of our assets, AWS recently delivered a solution at a site based in the South-West to ensure water quality & water treatment.

A number of risks to water treatment were identified on site following analysis by our Asset Optimisation team:

1. Increasing levels of Atrazine in raw water feed from.
2. Aged water treatment works requiring upgrade.
3. Over abstraction from the aquifer.
4. Lack of Auto shut-down on treatment process.

With a historical treatment works on-site and raw water being drawn from boreholes, AWS needed to move quickly to ensure we continue to provide wholesome water to our customers.

Using our knowledge and expertise we worked with key stakeholders to develop a solution to help mitigate these risks on-site. Focusing on each risk identified and providing an improvement solution as part of the project.

TOPIC

AWS Capital Works Programme

AIM OF THE PROJECT

Deliver a solution that ensures water is abstracted within permit conditions and is compliant with the Private Water Supply and Water Supply (Water Quality) Regulations.

Working with our supply chain partners the following improvements were identified to meet the project requirements:

- Install GAC Filters to remove the Atrazine Desethyl.
- Upgrade WTW assemblies (dosing pumps, pipework etc)
- Install a new water meter
- Install telemetry for dosing, auto shutdown and SVR levels

The objective of this installation is to provide a new dosing system, for the removal of Atrazine in the borehole abstraction water before entry into the site service reservoir.

A new Hypochlorite Dosing system was also installed to replace the existing dosing system and provide a disinfection dose on the borehole waters.

Upgrades to Reservoir level controls and BH panel modifications were made to improve water treatment and operator controls on site. And a new control panel was installed to provide auto/manual control of the filters and CL2 dosing providing visibility and control settings.

The site will also have an auto shutdown system installed into the control panel.

This highlights AWS continued commitment to invest in our assets.



02 The Results

Works commenced on site in September 2022 and were completed by February 2023. The results seen so far include water quality improvements which ensure that the new abstraction requirements are met.

All new assemblies installed are graded Condition Grade 1 and the asset register has been updated to reflect.

The water treatment facilities on-site now also meet the requirements of the Private Water Supply Regulations fully and have reduced risk of failure/non-compliance in the future.