Case Study: Weetabix Enhances River Protection with Automated Drain Closure System

To strengthen protection for nearby watercourses, Weetabix partnered with Aquasentry to deliver a rapid and reliable solution for containing potential pollution incidents. Working at its Burton Latimer manufacturing site, Aquasentry designed and installed an automated drain closure system that enables site personnel to isolate drainage outlets instantly in the unlikely event of an environmental emergency.

Key Outcomes:

- Five drainage outlets protected by automated closure valves.
- Instant emergency response at the touch of a button.
- Protection for nearby watercourses through pollution prevention and firewater containment.
- Enhanced environmental compliance and site resilience.
- Remote monitoring and control capability.
- High customer satisfaction and potential rollout to additional sites.

The Site's Requirements

The site has five drainage outlets that flow into a river adjacent to the facility. Existing manual penstocks provided a means of isolating the drainage system, but they required personnel to physically attend each location and operate the valves using a key.

A prompt response helps protect nearby watercourses should a spill, contamination incident or fire occur. Automating the existing manual controls offered an opportunity to respond more quickly and reduce the risk of pollutants entering the local watercourse. The site also needed a solution that would help mitigate the risk of firewater runoff reaching the environment during an emergency.

Two existing penstocks on the riverbank needed to be relocated to enable integration with an automated system.

Environmental Protection Priorities

- Protecting the adjacent river from potential pollution.
- Retaining firewater runoff on site should an emergency occur.
- Enabling faster drain closure than manual operation.
- Reducing the need for personnel to enter potentially hazardous areas during an emergency response.

What Did Aquasentry Do?

Aquasentry designed and delivered a comprehensive automated drain closure solution tailored to the site's requirements.

The project included:

- Installation of five **automated drain closure valves**, ranging in size up to 750 mm.
- Construction of two new chambers to accommodate relocated valves in suitable locations.
- Installation of associated ducting and supporting infrastructure.
- Groundworks delivered through specialist subcontractors.
- Ground contamination and asbestos-related surveys prior to excavation works.
- Integration with a Netbiter remote monitoring and control platform.



Groundworks undertaken and hydraulic closure valves installed.

At the heart of the system is a simple, user-friendly control interface located in the site's security area. Authorised personnel can instantly close all drainage outlets at the touch of a button. The system can also be accessed remotely via an internet connection, providing additional flexibility and resilience should an emergency arise.

The Outcome

The completed installation provides immediate containment capability across the site, significantly reducing the risk of pollutants reaching the nearby river.



Signage at the Burton Latimer site during the project

By replacing manual operation with automated controls, the site now benefits from:

- Instant drain isolation should an environmental incident occur.
- Improved preparedness for spill and firewater runoff events.
- Enhanced environmental protection.
- Greater operational efficiency and confidence.
- Improved visibility through a remote monitoring dashboard.

The works were completed over approximately three to four weeks and included addressing site-specific installation requirements to ensure the system met operational requirements.

The customer was highly satisfied with the outcome of the project and has since discussed potential opportunities for similar solutions at another site.

> "The Aquasentry team were excellent throughout the entire project. From the initial planning stages through to final commissioning, the site engineers were always supportive, professional, and responsive. Their expertise and commitment ensured the installation was completed smoothly with minimal disruption to site operations. The automated drain closure system has significantly improved our emergency response capability and provides further confidence in our ability to protect the local environment."

The Added Value of Automation

The automated containment system builds on the protection provided by the existing manual penstocks, enabling a faster response should an incident occur.

Rapid drain isolation helps prevent contaminants, process waste or firewater runoff from reaching the adjacent river should an incident occur. Remote operation also reduces the need for personnel to access valve locations in potentially hazardous conditions.



Drain closure system control panels installed on site and an illustration of the remote monitoring dashboard.

The new automated system addresses these requirements by providing immediate control of critical drainage infrastructure when it matters most.

Could Your Site Strengthen Environmental Protection at the Touch of a Button?

Talk to Aquasentry about an automated drain closure system tailored to your drainage network and environmental protection needs.

