

When an aging spill control device began working less efficiently and its reliability faltered in recent years, it was deemed no longer cost-effective to refurbish.



Against this backdrop, IBS was engaged to design, manufacture and install a new spill control solution, in order to provide isolation of flows from the surface outfall of this large medical manufacturing plant.

The IBS solution was to install a new 1200mm x 1200mm stainless steel penstock – a type of flow control device used to isolate or control the flow of water – at the downstream end of the existing outfall pipe. However, due to the absence of an existing structure to fix to, a pre-cast concrete headwall was built into the design. The project was not without its

challenges; extensive excavation works were required, a constant battle with groundwater, plus the need to keep surface water drainage operational at all times throughout the programme. To address the need for functioning surface water drainage, IBS deployed an over-pumping system that could contend with the surface water and groundwater flows,

whilst a temporary dam was installed to ensure back-flow from the downstream beck did not affect the works.

The original equipment was housed inside one of the surface water drainage chambers and access was difficult. The solution designed and implemented by IBS ensured that all maintainable equipment was above ground, with easy access for the end user, which subsequently removed the risk of operators entering a confined space.

Sector:
Healthcare

Location:
Gargrave

Client:
Scapa Healthcare

Main Contractor:
Advanced Pump & Hydro

Product/s:
Stainless Steel Penstock and Auma Gearbox

Size:
1200mm x 1200mm



With the over-pumping system in place, the enabling works could then be completed, which allowed the concrete headwall and stainless steel penstock to be installed. Once complete, commissioning was carried out to the total satisfaction of the

client and end user. The scheme undertaken by IBS was extremely cost-effective when compared to estimates the client had previously received to refurbish the original equipment. In addition, the previous project had been

rolling on for many years with little sign of the clients' objective being achieved. Once IBS was engaged, the cost savings became apparent and helped facilitate the go-ahead of the project.