



Case Study

Multi-Site Complex Repairs



**Telecommunications
Scotland**

The Project

Adler and Allan were contracted by our client, a major telecommunications operator, to undertake complex works to 400 sites to be completed within a 16 week period.

We were asked to provide a solution to containing potential oil leaks and spills from the back-up generators and oil tanks in their telephone exchanges. This was required to comply with the Water Environment (Oil Storage) (Scotland) Regulations and mitigate their risk from oil discharges to the environment.

It was also a requirement that the equipment was not to be removed and must remain operative during the containment works.

Some sites held a large quantity of oil (up to 10,000 litres) contained within tanks and 'day-tanks' installed at height on plinths behind generators. Sites also had several generators and a complex layout of pipework, with hand-pumps.

Rooms contained other equipment, such as switch-gear, cabinets, desks, lockers and several doors. The large volume of oil to be contained and the layout of equipment in the room presented a challenge to design a containment system which would capture all the potential sources of oil leaks, while permitting other operatives using the room adequate access.

The Solution

Due to the limited space in site rooms, relative to the large volume of oil to be contained, the new Adler and Allan JBAR system was employed as the most cost-effective and rapid solution. This modular bunding system has the flexibility to be installed in any configuration required, to accommodate different layouts of equipment and size or shape of room.

The GRP (glass fibre reinforce plastic) 300mm high units were firmly bolted to floors in accordance within the design drawings, around tanks and generators, leaving sufficient space around other equipment to allow easy access.

100mm high GRP units were installed around the back and sides of raised day-tanks on the plinth behind generators, to divert any spillages down into bunds.

Adler and Allan's mobile Adalline polyurea spray system was employed to provide an impermeable lining to each bund. This system is contained within an enclosed trailer and comprises a high-tech mechanism which delivers the pre-heated liquid components under pressure via a hose and spray gun to the area to be sealed. The Adalline coating is extremely fast-setting (in minutes) and provides a water-tight seal, which is both highly robust and withstands contraction and expansion.

On completion of the spraying, pre-cut anti-slip strips were installed to provide safe access for personnel requiring access to the generators or tanks.



The Outcome

All 400 sites were completed within the 16 week deadline.

The Client was provided with a warranted containment solution to mitigate against risks of spillage and ensure compliance with the Regulations. The solution was highly cost-effective, rapid and permitted continuity in operation of the plant during the installation process.

