

SYLWRAP Case Study

Chemical Plant 350mm Effluent Pipe Repair

A leaking 350mm effluent pipe running underneath salt marshes and out to sea could only be repaired in an eight hour window whilst the tide was out



The leaking section ran beneath salt marshes, leaving an eight hour window whilst the tide was out to access, excavate and clean the pipe, and seal the leak

Defect

The pipe carried effluent from the chemical plant underneath salt marshes and out to sea. It was leaking from both ends of a clamp fitted as part of a previous failed repair.

Accessing the pipe was only possible whilst the tide was out, leaving just an eight hour window to excavate and repair. No heavy tools or machinery could be used as they would sink when transported over the salt marshes.



Effluent was escaping from both ends of a failed pipe repair clamp, seen in the centre of the pipe.

Solution

The steel pipe beneath the clamp had deteriorated to the point there was a risk that removal of the clamp could have led to a collapse of the line.

It was decided to leave the clamp in place and encapsulate it with **Sylmasta AB Original Epoxy Putty**. AB was applied around the clamp, curing to form a super-strength shield able to withstand the harsh environment of the salt marshes.

A concrete coating was applied over the excavated section, followed by several layers of **SylWrap HD Pipe Repair Bandage**. SylWrap HD created an impact-resistant protective sleeve, uniting and strengthening the weak and solid areas of repair.



AB Original encapsulated the clamp, sealing all areas which the pipe was leaking from

Result

The speed and ease with which AB Original and SylWrap HD are applied enabled specialist marine contractors to complete the repair, despite the short time frame before the tide returned and the pipe was again covered by sludge and seawater.

Following the repair, the contractors were suitably impressed to approve AB Original for use on a similarly complex application set for the near-future.



SylWrap HD was wrapped across the entire length of the pipe, completing the repair