

## PROJECT PROFILE

### PROJECT

Poole Sewage Treatment Works,  
Poole, Dorset

### SUMMARY

Concrete repairs and waterproofing  
of the sewage treatment tanks

### PRODUCTS

Monomix HD, Monopour PC6,  
Cemprotec E942

### CLIENT

Wessex Water

### CONTRACTOR

South West Concrete Repairs (SWCR)

### BACKGROUND ►

Wessex Water operates just over 400 Sewage Treatment Works (STWs) across Somerset, Wiltshire, Bristol, Gloucestershire and Dorset. Combined, these STWs treat 480 million litres of sewage from 2.8 million customers every day.

One of the STWs is Poole Sewage Treatment works which treats incoming sewage from the Poole area, serving a population of 168,397 people. Final effluent is discharged into Poole Harbour. Some of the sewage treatment tanks within the plant were showing signs of corrosion and spalled concrete due to the chemical reaction of Hydrogen Sulphide (H<sub>2</sub>S) which is highly corrosive. South West Concrete Repairs (SWCR) were tasked with refurbishing the tanks to return them to full use.

### THE SOLUTION ►

Flexcrete products were specified for this project as we could provide a full suite of concrete repair and waterproofing materials. SWCR first cleaned the tanks using high pressure power washing before all the defective concrete was broken out. Steel reinforcement was cleaned, treated and replaced where required.

Two Flexcrete concrete repair mortars were used for the repair work - **Monomix HD** and **Monopour PC6**. **Monomix HD** is a trowel applied, waterproof, class R4 structural repair mortar which has excellent low sag properties and can be applied up to thicknesses of 80mm in a single application. **Monopour PC6** is a non-shrink, pourable micro concrete designed for large areas of concrete repair. These repairs allowed the walls of the tanks to be reinstated to their original profile.

The final stage of the works was to spray apply two coats of **Cemprotec E942** to all walls and floors within the sewage treatment tanks. **Cemprotec E942** is a waterborne, epoxy and cementitious modified coating which can be applied to damp substrates with far lower levels of surface preparation than conventional coating systems. It can be applied in confined areas, as it has a water-based, environmentally friendly composition and releases no hazardous solvents or heavy odour. **E942** will provide additional chemical resistance and will significantly extend the life expectancy of the tanks.



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Quality  
Environmental  
Health & Safety

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