



Environmental  
Management  
Services

## HFO Tank Decommissioning Case Study

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### Summary

We were contracted to decommission the iconic "Thomas the tank engine" Heavy Fuel Oil tanks at Singleton Hospital in Swansea.

The 45,000 litre tanks had been redundant for several years and contained around 7,000 litres of residual Heavy Fuel Oil inside each tank.

The tanks were emptied, removed and transferred to a licenced facility to be recycled. All of the associated infrastructure was decommissioned including the pipework, bunding and gantry.



We were contracted to decommission the iconic "Thomas the tank engine" Heavy Fuel Oil tanks at Singleton Hospital in Swansea.

The tanks were painted in the 1990's to look like Thomas, Henry and James, whilst they were overlooked by the children's ward. Despite the fact the overlooking building is no longer a children's ward the tanks were still a favourite with staff and patients at the hospital.

The 45,000 litre tanks had been redundant for several years and contained around 7,000 litres of residual Heavy Fuel Oil inside each tank.

The oil was sampled to establish the sulphur content. As the sulphur was below the recycling threshold the oil could be sent for recycling, leading to a substantial waste and cost saving.

The oil needed to be heated to between 50-70 °C to lower its viscosity to a level where it could be pumped. In two of the tanks the heating coils had been removed meaning temporary heaters had to be installed to heat the HFO to the required temperature.

Once the oil was sufficiently fluid the 3 tanks were emptied by a vacuum tanker and the oil was sent for recycling.

The pipework was capped, isolating all lines to and from the tanks.

The gantry surrounding the tanks was dismantled allowing access for the crane to lift the tanks out.



Due to the nature of the site it was imperative to minimise the time-frame of the project and limit disruption to site.

In order to reduce the disruption and time-frame the tanks were removed from site in one piece and transferred to a licensed facility to be dismantled and thoroughly decontaminated so that they could be sent for recycling.



The area the tanks were in was going to be used for redevelopment meaning the entire infrastructure associated with the tanks needed to be removed.

Over years of use the bund had become heavily contaminated with oil.

We thoroughly decontaminated the bund using specialist degreaser and jet washing to reduce contamination to a level where it could be demolished and disposed of as inert waste, leading to another substantial waste and cost saving.