

# Site Demolition & Remediation - Salisbury

Former Use: Transformer Repair Depot  
Client: Scottish & Southern Energy Plc  
Value: £265,000  
Location: Salisbury, Wiltshire

Provectus undertook a fixed price all risk design and build contract for the demolition and remediation of a former electricity substation and transformer repair depot. Historic storage of waste transformer oils and diesel products in underground storage tanks had resulted in contamination within soil and groundwater by diesel range hydrocarbons and transformer oils containing polychlorinated biophenyl's (PCB's). The presence of such contamination posed unacceptable risks to the underlying chalk major aquifer, therefore remedial action was required prior to redevelopment to commercial end-use.

As part of an ICE Design & Build Contract, the following works have successfully been undertaken by Provectus on programme and to budget:

- Controlled removal of all waste oils in accordance with the Duty of Care requirements of EPA 1990, with incineration of recovered transformer oils at a licensed facility.
- Controlled demolition of a workshop building and removal of foundations to facilitate remediation of contamination that has migrated below the slab from an adjacent storage tank.
- Decommissioning and removal of underground storage tanks.
- Controlled removal of free product transformer oils from the water table in the vicinity of underground transformer oil tank, using compressed air powered Xitech™ product recovery pumps installed in vertical product recovery wells. Off-site disposal of recovered oils to a licensed facility in accordance with Duty of Care.
- Targeted excavation and off-site disposal of hydrocarbon contaminated soils.



- Ex-situ removal of contaminated perched groundwater encountered during excavation; tankered off-site using a licensed contractor in accordance with Duty of Care.
- In-situ treatment of residual hydrocarbon contamination in groundwater using the innovative ISOC™ (In-Situ Submerged Oxygen Curtain) oxygen infusion technology. This technology significantly increases the rate of natural biodegradation within the aquifer by super-saturating the groundwater with oxygen (>50ppm recorded).

All works were designed and executed in-house, using our own staff and remediation equipment. The contract has included the provision of collateral warranties for both the current and future owners of the site.

As well as providing a more cost-effective solution, the ISOC remediation technology has reduced residual groundwater treatment timescales from the 2 years anticipated for conventional pump and treat technology, to 6 months from commissioning.