



## NORM Management at Wytch Farm



Oil and gas are extracted from beneath the Purbeck bedrock and Naturally Occurring Radioactive Material (NORM) accumulates where temperature or pressures change or where there is a disturbance to laminar flow. 'Tubulars', pumps, surface valves and vessels, are particularly susceptible to scale deposition. These require cleaning to reduce contamination to regulatory limits. Three problems exist:

- Radioactive isotopes –  $\alpha$  emitters
- Hard scale or plated deposits
- Hydrocarbon contamination

Although specialising decontamination technologies, **normtec** have also pioneered methods of proving items are clean. Monitoring protocols have been established in the UK and accepted by the UK Environment Agencies and now used by several decontamination contractors.

**normtec** oversee many 'On-Site' operations including a patented chemical decontamination process which deals with much of the feedstock. The process needs only simple tank immersion and is inherently safe to use outdoors.

To date over 3,000 tubulars, pipe work, pumps and valve items have been cleaned for refurbishment, re-use or disposal as scrap; offering the client considerable savings in radioactive waste costs.

Since some equipment is currently despatched to contractors facilities for dismantling and treatment with High Pressure Water Jetting (HPWJ), **normtec** have also been instrumental in establishing a new NORM Dismantling and De-scaling facility on a Licensed Site. This provides the client with long term assurances in both HSE performance and future capacity for abandonment.

Wytch Farm is set in the environmentally sensitive area of Poole Harbour and environs, with Outstanding Natural Beauty and SSSI status. Conditions of operation clearly require high standards of Health, Safety and Environmental (HSE) management.

**normtec (RDB) Ltd** have been actively engaged in managing all NORM issues since 2001 and have established improved working practices to Client, Contractors and Environment Agency satisfaction.

**normtec** have successfully introduced or managed the following technology and protocols to increase HSE performance and drive down costs.

- Decontamination of tubulars, pumps and valves
- Professional radiological supervision of rig work
- Validation of patented chemical decontamination
- Laundry procedures for soft waste
- Specialist pipe probe for In-Situ monitoring
- Training & awareness
- QA Procedures for 'Free Release'
- Re-injection of sludges
- Extensive revision of 'Local Rules'
- Health Physics and RPS Support
- Monitor and Probe Maintenance
- Compliance reports
- 'Exempt' landfill Disposal
- Sampling and Analysis



**normtec** regularly use specialist probes and protocols to demonstrate compliance