

## Project Example – Remediation of Commercial Nurseries, Lancashire.

Project Start – March 2013

Project End – July 2013

In March 2013, the owner of this commercial property contacted the Environment Agency regarding oil discharging into a watercourse that ran along the property boundary. The property used oil to provide hot water and central heating to a newly constructed stone-built café and the fuel pipe from the kerosene storage tank had been accidentally damaged during these construction works.

CTSL provided an initial emergency response to prevent any further off-site migration, followed by an initial site assessment. Given commercial deadlines imposed by the property owner, CTSL were instructed to begin remediation work immediately and were given a very tight deadline in which to complete these works to the satisfaction of the regulators.

The location and extent of the kerosene plume within the insured property suggested that spilt oil had moved into the soils adjacent to the café building and had then moved towards the watercourse where it was able to discharge through land drains and through the retaining wall to impact the controlled waters. An inspection of the retaining wall that divides the property from the watercourse identified two land drains that discharged directly into the beck. In order to protect the watercourse, a trench was excavated alongside the retaining wall, the purpose of which was to intercept and temporarily cut-off all drains and other direct pathways which were allowing oil to reach the beck and to produce a sump into which impacted water would collect. In addition, at points along the banks where oil was entering the watercourse, floating booms and oil-only absorbent pads were placed to collect the on-going discharge. Impacted water from the sump and other locations was pumped through an oil-water separator and a carbon filter vessel. After analysis to show the treated water was uncontaminated and with the authorisation of the regulators the treated water was discharged on site.

CTSL excavated up to 400te of impacted soil from between the spill point and the watercourse, to depths up to 2.4m bgl. Once excavation was complete, soil samples were recovered for laboratory validation. Having successfully validated the excavation, CTSL reinstated the remediated area with quarry-won granular fill, compacted in approximately 150mm layers with a white limestone aggregate finish. All works were completed on budget, to the satisfaction of the property owner and the regulators and to the required timescales.

