

Project Example – Small Scale In-situ Chemical Oxidation – West Lancashire.

Project Start – Mar 2012

Project End – June 2012

CTSL were commissioned to undertake a programme of remediation at the above property following an incident that occurred in November 2011 when significant quantities of diesel oil were found to be present in a drainage ditch along the western boundary of the property and in dykes further downstream. Following a phase of non-intrusive site assessment and initial clean-up, commissioned by the Environment Agency and a programme of intrusive investigation commissioned by loss adjusters, the source of the oil leak was identified as one of two redundant above ground oil storage tanks located within a bunded area within the insured property.

After negotiation with the Environment Agency, the requirements for remediation focussed on the presence of oil-contamination in the system of land drains underlying one of the large greenhouses from which commercial activities at the property were undertaken. On the basis of the intrusive investigation, CTSL concluded that oil from the on-site AST had found its way into the existing site drainage system and had initially discharged to the ditches along the western site boundary. As a result of rising water levels in the receiving waters at the time of the spill, some of the contaminated water had been forced back up the drainage system and entered the network of perforated land drains beneath the impacted greenhouse. This oily water contaminated the gravel surround in which the land drains were laid but also contaminated a zone of natural soils surrounding each drain.



The remediation consisted of a programme of excavation which was targeted at the impacted land drains and the soils that immediately surrounded them. The works were design to avoid having to dismantle sections of the greenhouse. In total approximately 350 linear metres of contaminated land drain, gravel and adjacent soils were removed to a nominal 1m depth and to 1m either side of the drainage centreline. After validation, the excavations were to be reinstated with clean imported soil, of suitable quality for continued commercial horticultural activities at the property. Once the greenhouse was fully reinstated, the elements of the land drain system that had been removed during the remediation were replaced with new land drains and the system reconnected to an appropriate discharge point.

On the basis that the volume of material remediated was anticipated as being less than 1000m³, the Environment Agency confirmed in writing that the proposed remediation would not require a Waste Management Permit. Given the scale of the works in terms of duration and manpower however, the remediation was notifiable under the CDM Regulations and all CTSL operations were undertaken in conjunction with a CDM Coordinator appointed by the client.