



## De-watering of hydrocarbon contaminated waters from a tidal influenced excavation, Torry Quay, Aberdeen

**The Client:** Civils Contractor

**The Challenge:** Following identification of hydrocarbon impacted water during de-watering works, Soilutions were contacted to provide a solution. Impacted waters comprised significant free phase oil on the surface, significant dissolved phase oils, and unknown sediment loading. Requested flow rates were 60m<sup>3</sup>/hr. Supervision was requested to be at a minimum.

**The Solution:** Within 1 week of instruction to proceed, Soilutions mobilised one of their own groundwater treatment kits comprising a 40m<sup>3</sup> settlement tank, 40m<sup>3</sup> oil water separator, 2 sand filters and 2 carbon filters. To increase the flow rate Soilutions cross hired in 2 extra kits to help cope with the required flow rates. All systems were powered by a site generator with a bowser. All 3 systems were set up within a bunded area, restricted to small area on the docks around which major civils works were being carried out.

Works were carried out under Soilutions SEPA Mobile Plant License. Impacted waters were pumped through all 3 systems simultaneously, removing sediments and organic contaminants, before being discharged to the dock.

During pumping at full capacity, the system uplifted very fine silty sediments in to the systems. Adaptations to the systems were made to accommodate the increased sediments. This included increased frequency of sand filter backwash, and changing of sand filter grain size. Sediment removal using chemical flocculants was investigated and ready for mobilisation had the problem persisted.

All works were carried out to strict schedules dictated by the contractor.

The project was delivered on-time and at the agreed budget.

**Duration:** 2 Months on-site



IMPACTED WATER



DE-WATERING DISCHARGE WATERS



ALL 3 TREATMENT KITS & GENERATOR



SOILUTIONS TREATMENT EQUIPMENT



Certificate Number 4733  
ISO 9001 / ISO 14001 / OHSAS 18001

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