

# Project Example – Kerosene Remediation – Grade II Listed Building, Shropshire

Project Start – February 2011

Project End – December 2011

Built in the mid-1800's, this listed building suffered a significant kerosene leak which affected soils outside the property as well as the substantial sandstone walls of the ground floor and basement. Although the spill had occurred at the southern end of the house and had largely affected the basement walls, kerosene odours were detected throughout the building and contamination of masonry in lower walls and floors was noted in a number of ground floor rooms.

The first priority was containment of the spill and associated oil odours. Complete Tank Solutions excavated contaminated soils and removed these to an appropriately permitted landfill. Studies then focussed on the movement of vapours through the basement and by employing a number of barriers to air movement combined with fans, ducts and new venting points, the movement of kerosene vapours was substantially controlled.

After a programme of core drilling to establish the distribution of kerosene within the mass of the masonry, methods of possible in-situ treatment were considered. The specialist masons and engineers that Complete Tank Solutions consulted at this time however, were concerned about the adverse effects that liquid treatment solutions may have on the porous sandstone and lime mortar. The only viable solution identified therefore, was the removal of the contaminated masonry.

Complete Tank Solutions worked with specialists in heritage masonry to undertake the removal of the contaminated building fabric – this work also required the involvement of specialist structural engineers to design temporary support to the Victorian structure during the remedial works and the involvement of architects specialising in heritage projects to advise on the implication of the Grade II listing on the works that were required.

As with any commission such as this, new information came to light as works progressed, requiring the entire project team to take a flexible approach to the works and to the frequent revisions that were required to reflect newly revealed conditions. As well as undertaking elements of the remediation Complete Tank Solutions project managed the entire works, liaising frequently with the loss adjusters to determine budget provision for the remediation. Complete Tank Solutions were also responsible for the full validation of the works during and after the remediation.

