



BACKGROUND

This 17-acre property was used as a pharmaceutical manufacturing plant from about 1960 to the early 1990s. In addition, it was the company's main warehouse and contained office areas. The total size of the buildings on site was 270,000 sq. ft.



Barenco performed an environmental assessment and subsequently, a **soil remediation program**. Three areas of the site required soil remediation: the solvent storage area, the caustic storage tank area and the fuel oil storage tank area. Although the future use of the property had not been determined at the time, the client required the property to be decommissioned to meet the most stringent criteria i.e. residential land use criteria. Benzene, toluene and various chlorinated aliphatics were detected in the soil in the solvent storage area. Approximately 500 tonnes of soil was removed from this area and disposed in a licensed landfill site. This necessitated the removal of soil from beneath the footings of the building. Contaminated soil was removed in three-foot wide sections and

the sections were immediately under-pinned after the removal of the soil. Fuel oil, benzene, toluene and various chlorinated aliphatics were detected in the soil in the fuel storage area. The soil excavated from this area was stockpiled in three piles on site. One pile consisted of clean soil. A second pile consisted of soil containing oil staining or odour. A third pile consisted of soil containing a predominant solvent odour. The clean soil was returned to the excavation. The soil containing oil, classified as recyclable solid non-hazardous industrial waste, was treated at Barenco's soil recycling facility at Keele Valley Landfill. The soil containing chlorinated solvent concentrations was landfilled as non-recyclable solid non-hazardous industrial waste. About 2,800 tonnes of soil was removed from this area. Soil in the caustic storage area originally had a high pH. In order to neutralize the soil, an agricultural pH amendment was added to the soil.

THE RESULT

The building was demolished and post-demolition soil testing confirmed that the subsurface soil conformed to the guidelines for residential land use. The property has since been re-developed for mixed commercial, multi-unit residential usage.