The Sellafield Contaminated Land and Groundwater Management Project: Characterisation of a Complex Nuclear Facility

Abstract

The Sellafield site in North West England is one of the oldest and largest nuclear sites in the world, with a 70 year industrial history of processing and power generation. At certain points in time this industrial activity has affected the quality of land on parts of the site and one of the main tasks for Sellafield Ltd is to understand and control the legacy of ground contamination to ensure protection of the workforce, the public and the environment.

Sellafield Ltd has recently completed a multi-million Pound investigation of the most complex part of the site in order to understand the impact of the various known and potential sources of contamination. The constraints of working in a challenging operational environment required both the use of tried and tested approaches and experimentation with innovative techniques. As experience was gained during implementation of the project, the characterisation plan was evolved and adapted to ensure a successful outcome.

The presentation will outline the role and importance of characterising land and groundwater at Sellafield, explain how the site investigation strategy and techniques were designed to meet the challenge and describe the performance of the investigation in practice. It will conclude with a summary of how the results will be used to better support ongoing safety and environmental management and to aid the development of strategy and planning for the future.

Abstract above fits into Session 3: Characterisation of land and groundwater.