

Waste Characterisation Database

Background

An international nuclear decommissioning consortium comprising Caski Consulting Ltd, Golder Associates (UK) Ltd, and Absolute Consulting Inc. has recently completed site works for a client, a Reactor Site in Essex (one of the oldest Magnox nuclear reactor stations in the UK) to develop a robust waste and materials inventory database that will help to plan and implement the pending decommissioning of the site.

The station's two first-generation Magnox reactors (this type of reactor used uranium fuel encased in tubes of magnesium alloy called Magnox) have been emptied (the fuel having been transferred to Sellafield) and the site is now undergoing major decommissioning following its shutdown in March 2002 after 40 years of operation.

Problem:

The current works, which commenced in October 2006, involves the Caski-Golder-Absolute consortium undertaking a full inventory of all structures, plant and processes at the site that may be classified as waste during the later decommissioning phases of the site. The inventory work includes both reactors and ancillary buildings (including cooling ponds and active waste handling facilities). In addition, to aid in disposal of potentially contaminated wastes, the extent of hazardous materials present on the site was quantified.

Solution:

The results of these works has been collated into a database that has been specifically developed for this project by Caski.

Tony Bejma, (Absolute Consulting Inc) Project Manager, said: "The site works being undertaken by the consortium team have fed into a comprehensive database which also includes decommissioning strategies and waste management protocols for the individual waste streams, as well as a fully auditable quantification trail of calculations, laboratory results and sampling regimes.

The outputs of this database will provide the project decommissioning team with sound data that can be used in tendering for the works, by reducing the risks to contractors, which will result in lower tender prices, as well as increased control and confidence for the project decommissioning team."

Caski Consulting Ltd, P.O.Box 239, Bristol. BS32 4XG
www.caski.com
email: info@caski.com