Research Sites Restoration Ltd

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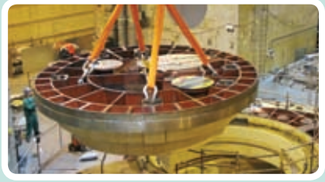
Winfrith Key Achievements

Introduction

At the Winfrith site of RSRL (Research Sites Restoration Ltd) based in Dorset excellent progress has been made in the decommissioning of many of the facilities. There are no longer any high hazard nuclear facilities on the site. The team are proud of what has been achieved so far and look forward to continuing towards our end goal of full site decommissioning.

Andy Staples, RSRL Operations Director

SGHWR (Steam Generating Heavy Water Reactor)


Before

The prototype Steam Generating Heavy Water Reactor was designed and built in record time. The full power of 100MW electrical was reached in January 1968. During its lifetime SGHWR earned substantial revenues from the National Grid.

During

SGHWR closed down in 1990. Decommissioning to date includes removal of the fuel elements, demolition of the cooling towers/ round house, removal of heavy water, drainage of the fuel ponds and the decommissioning of the secondary containment.

After

The scheme for final decommissioning has been completed. Funding constraints resulted in the reactor being placed in care and maintenance from April 2008.

DRAGON Reactor



Before

DRAGON a 20MW High Temperature reactor sponsored by the International Organisation for Economic Co-operation and Development (OECD) was built in 1964. The reactor with its combination of graphite structure, coated-particle fuel and helium cooling was outstandingly successful.

During

DRAGON operated for 17 years until it was closed and held in care and maintenance until 2005, decommissioning to date includes removal of all redundant equipment in the outer and inner containment and non-containment areas, decontamination to low levels, treatment of wastes and refurbishment activities.

After

Following funding restrictions Dragon was returned to care and maintenance.

Building A52 – Alpha Materials Laboratory



Before

The Alpha Materials Laboratory (AML) was a two story building used for the manufacture of mixed oxide fuel for use in reactor physics experiments. In its operational life many tonnes of plutonium passed through this building. The AML ceased commercial operations in the early 1990s.

During

The work involved the decontamination of suites of glove boxes and ventilation plant in a manner that minimised the waste arising; this was followed by the removal of all internal and external systems, facilities and services including the demolition of buildings.

After

This was the first time a major plutonium facility had been decommissioned and represented a significant technical challenge. The outcome was the delivery of a green field site with no significant safety or environmental incidents.

Building A59 – Active Handling and Decontamination Building



Before

Since the early 1960's the A59 building operated as a Post Irradiation Examination facility and included high activity cave lines, pressurised suit operations area, as well as general workshops and operations areas.

During

Decommissioning commenced in early 2001, and was tackled in three stages: initial clearout; decontamination; and demolition.The safety management was good and an excellent safety record was maintained throughout A59 decommissioning.

After

A59 was a significant category 1 nuclear facility and is one of the first of its type to be decommissioned, leaving a de-watered hole. The building has been successfully decommissioned within sanctioned programme and cost.

Building D50 – ZEBRA



Before

The ZEBRA reactor (Zero Energy Breeder Reactor Assembly) went operational in 1962. It was a reactor used purely for research and produced no energy. The reactor operated safely until 1982 when it was shut down and placed in care and maintenance.

During

In 2001 preparations for decommissioning began, key decommissioning tasks included removal of contaminated plant/ pipework, industrial hazards such as asbestos and final demolition of the reactor bioshield.

After

The final demolition was completed in 2006 and the area has now been grassed. The ZEBRA project was completed to time and cost.

B2/B3 complex









Before

Building B20 housed two low powered reactors NESTOR and DIMPLE. These were amongst the world's longest running and successful research facilities and were at the forefront in providing vital safety and performance data for the nuclear industry. Both reactors ceased operation in 1995.

During

March 2006 saw the start of the final demolition work on the B20 complex; this took about three months and saw the demolition of B20, the Fissile Materials Store and ancillary workshops and offices.

After

The site is now a grassed area and delicensing is under way.

RSRL Winfrith Site

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