

WHITESHELL LABS DECOMMISSIONING PROJECT UPDATE

Brian Wilcox
Canadian Nuclear Laboratories Whiteshell

Abstract

The Whiteshell Laboratories (WL) is the first major nuclear decommissioning site closure project in Canada. WL is a nuclear research and test facility, built and operated by AECL since the early 1960s. WL occupies approximately 4400 hectares of land and employed more than 1000 staff up to the late 1990s, when the closure decision was made. Since September 2015, the site closure has been accelerated under the direction of Canadian Nuclear Laboratories. Nuclear facilities at WL include the WR-1 research reactor, hot cell facilities, radiochemical laboratories and a waste management area.

In the past three years, CNL has decommissioned and demolished over 20 buildings, accounting for greater than 15,000 square meters of floor space. In addition, the waste packaging and transportation program has been greatly expanded to facilitate shipments of low and intermediate level waste and spent fuel. New facilities are being implemented to enable the work, including liquid waste treatment, waste loading and waste recovery systems. A cornerstone of the accelerated closure plan is to enable the in situ disposal of a portion of the WR-1 reactor. The final end state is full decommissioning of all facilities and infrastructure and removal of stored wastes from the site.