International Conference on the Safety of Radioactive Waste Management, Decommissioning, Environmental Protection and Remediation: Ensuring Safety and Enabling Sustainability



Contribution ID: 254 Type: ORAL

INCORPORATING LAND USE CONSIDERATIONS INTO THE CLEANUP OF A COMPLEX NUCLEAR SITE IN CANADA: AN INTEGRATED APPROACH

Canadian Nuclear Laboratories (CNL) has made great strides toward the development of a safe and sustainable approach to the progressive decommissioning, remediation and revitalization of the Chalk River Laboratories (CRL) site.

Through the establishment of the Land Use Program, focus has been put on incorporating science-based principles and proactive, effective stakeholder and Indigenous engagement into robust site-wide planning for decisions on environmental cleanup and future land use. Safety is integrated into the Land Use Program through the adoption of risk-based exposure and dose objectives for non-radiological and radiological contamination which are used to model screening and cleanup criteria to be targeted during planning and execution of environmental remediation.

The overarching output of the Land Use Program is an Overview Decommissioning and Cleanup Plan for the site. This iterative plan provides a strategic approach to the decommissioning and remediation of CRL's buildings, infrastructure and contaminated lands, while integrating these plans with sustainability goals and other site priorities and projects, such as site revitalization and the availability of future waste management and disposal options. The plan will continually evolve to incorporate new information, lessons learned and feedback from stakeholders and Indigenous communities as cleanup progresses.

Primary author: SILKE, Renee (Canadian Nuclear Laboratories)

Co-authors: SNELL, Grace (Canadian Nuclear Laboratories); ROBITAILLE, Luc (Canadian Nuclear Laboratories); CHENNETTE, Rachel (Canadian Nuclear Laboratories); SCOTT, Samantha (Canadian Nuclear Laboratories); CLEMOW, Scott (Canadian Nuclear Laboratories)

Presenter: SILKE, Renee (Canadian Nuclear Laboratories)

Track Classification: Track 4 - Integrating the views of society into decision-making considering technical, environmental, social, and economic factors