



Presentation from the Canadian Nuclear Laboratories

Présentation des Laboratoires Nucléaires Canadiens

In the Matter of the

À l'égard des

**Canadian Nuclear Laboratories,
Chalk River Laboratories**

**Laboratoires Nucléaires Canadiens,
Laboratoires de Chalk River**

Application to amend its Chalk River
Laboratories site licence to authorize the
construction of a near surface disposal
facility

Demande visant à modifier le permis du site des
Laboratoires de Chalk River pour autoriser la
construction d'une installation de gestion des
déchets près de la surface

**Commission Public Hearing
Part 2**

**Audience publique de la Commission
Partie 2**

**May 30 to June 3, 2022
August 10, 2023**

**30 mai au 3 juin 2022
10 août 2023**

We would like to acknowledge



The Chalk River Laboratories site is located on the unceded and unsurrendered territory of the Algonquin Anishnaabe people. As an organization, CNL recognizes and appreciates their historic connection to this place. CNL also recognizes the contributions that First Nations, Métis, Inuit and other Indigenous peoples have made, both in shaping and strengthening this community in particular, and this province and country as a whole.



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Near Surface Disposal Facility Project

Commission Hearing – Final Submissions
August 10, 2023 | CMD 22-H7.1G



CNSC Commission

CNL is requesting a licence amendment to proceed with the construction of the Near Surface Disposal Facility for the disposal of solid low-level radioactive waste at the Chalk River Laboratories site.

Canadian Environmental Assessment Act 2012



CEAA 2012
EA-Decision



Nuclear Safety and Control Act – CRL Site Licence



Approval of new
Class 1B Facility
at CRL



Section 35 of the
Constitution Act, 1982



Duty to Consult
satisfied





Indigenous Nations and communities that have established or asserted treaty and/or Aboriginal rights:

- Algonquins of Pikwàkanagàn First Nation
- Algonquins of Barriere Lake First Nation
- Timiskaming First Nation
- Wolf Lake First Nation
- Métis Nation of Ontario
- Kitigan Zibi Anishinabeg First Nation
- Kebaowek First Nation
- Williams Treaties First Nations
 - Alderville First Nation
 - Beausoleil First Nation
 - Georgina Island First Nation
 - Rama First Nation
 - Curve Lake First Nation
 - Hiawatha First Nation
 - Scugog Island First Nation

Indigenous Nations, communities and organizations that have interests:






- Algonquin Anishinabeg Nation Tribal Council
- Algonquins of Ontario
- Anishinabek Nation
- Algonquin Nation Secretariat
- Mohawks of the Bay of Quinte

CNL is committed to working in collaboration with local and interested Indigenous Nations, communities and organizations.





NSDF is the Right Thing to Do

-  CNL has **listened** and made changes to the project
-  NSDF will enable **remediation** of the Chalk River Laboratories
-  NSDF is **protective** of **the environment** and the **Ottawa River**
-  NSDF is **protective** of **human health**
-  CNL has the **people** and **experience** to safely execute the project





Public Key Concerns Raised during Engagements



Justification for the Project



Waste inventory



Design & engineering



Long-term monitoring & accountability



Alternative means assessment



Environmental events



Protection of the Ottawa River



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Indigenous Engagement



Active listening, learning & engagement



Incorporation of Traditional Knowledge



True collaborations



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Procedural Direction – What We Heard



Terrestrial biodiversity



Water quality



Forest Management



Sites of cultural importance



Asserted rights from CRL site operations



CNL is committed to ongoing
and tailored engagements specific to
community preferences.

Waste Inventory



Low-level waste is suitable for disposal in an engineered near surface facility



Waste from only Canadian sources – mostly includes large volumes of contaminated soils and demolition debris



Strict waste acceptance criteria controls the inventory to ensure it is not hazardous after the design life

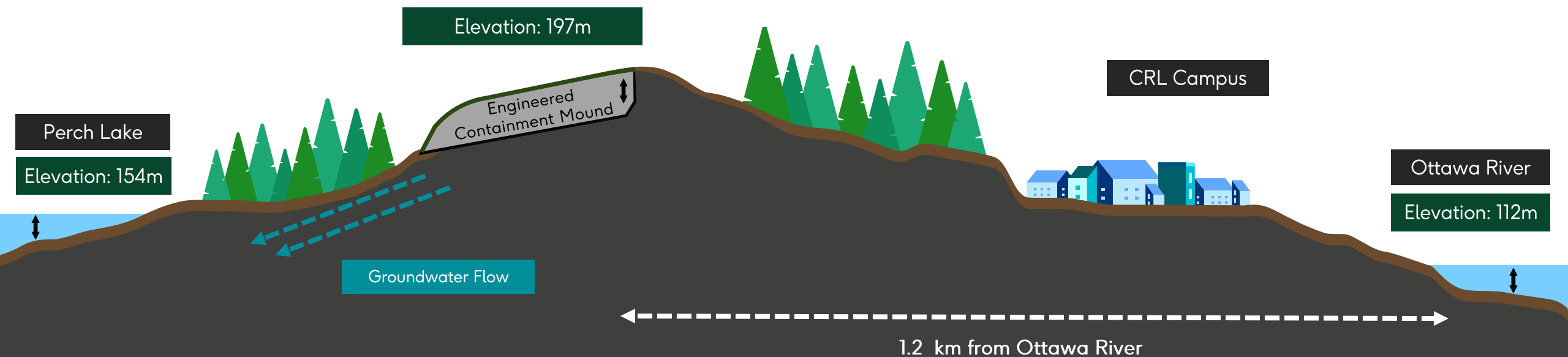


All waste – including legacy waste – is characterized using modern waste characterization approaches and standards



The Site Is Appropriate

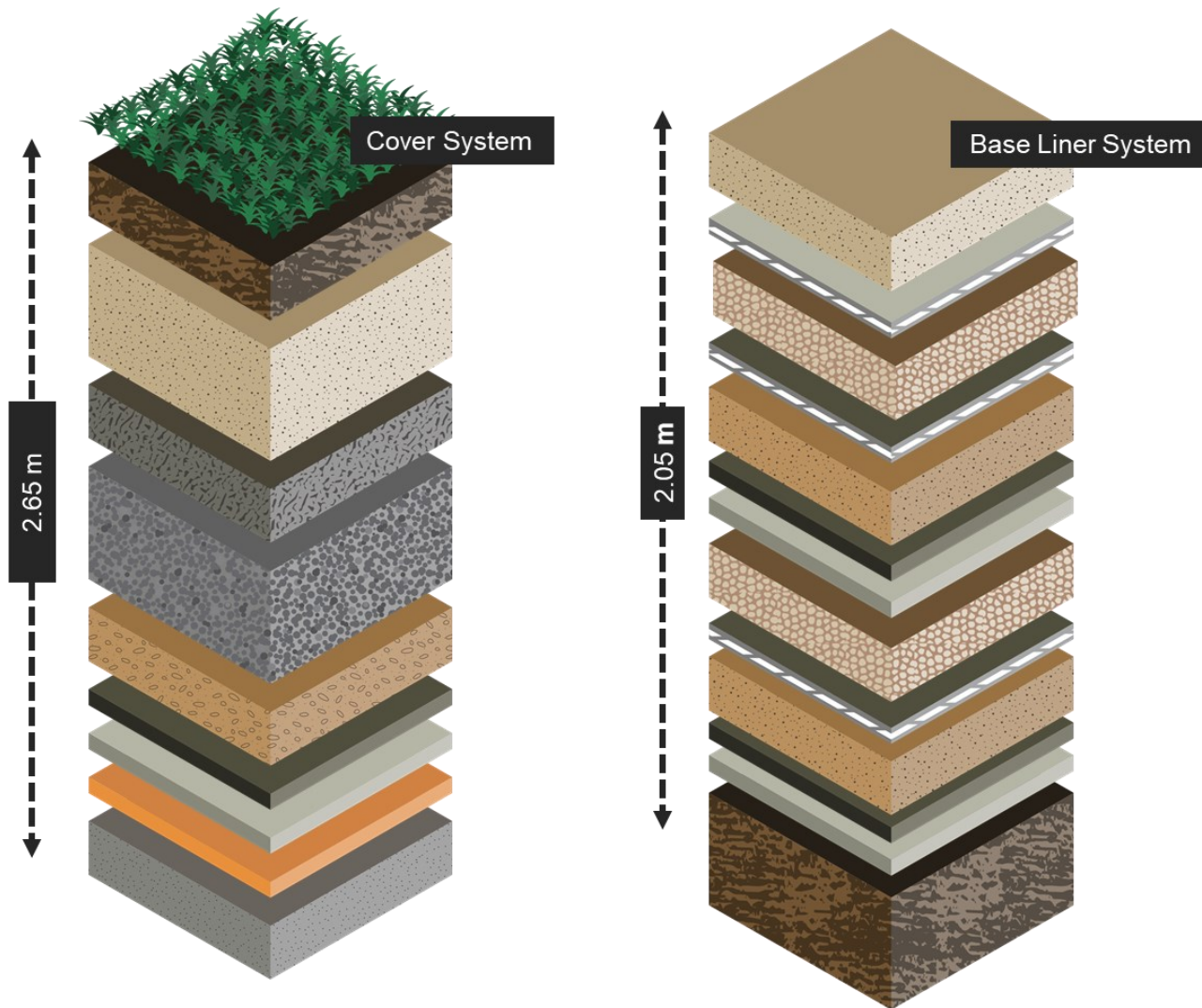
- ✱ Alternative means assessment included site selection process
- ✱ Sited on a bedrock ridge sloping away from Ottawa River
- ✱ Elevation well above the worst case flood levels
- ✱ Extensive site characterization performed





Engineered Containment

- Based on international best practices
- Multiple layers of natural and synthetic barriers design to work together
- Rigorous testing demonstrates design life will be exceeded
- Containment and isolation of waste for more than 550 years
- Passive safety features which also serve multiple safety functions

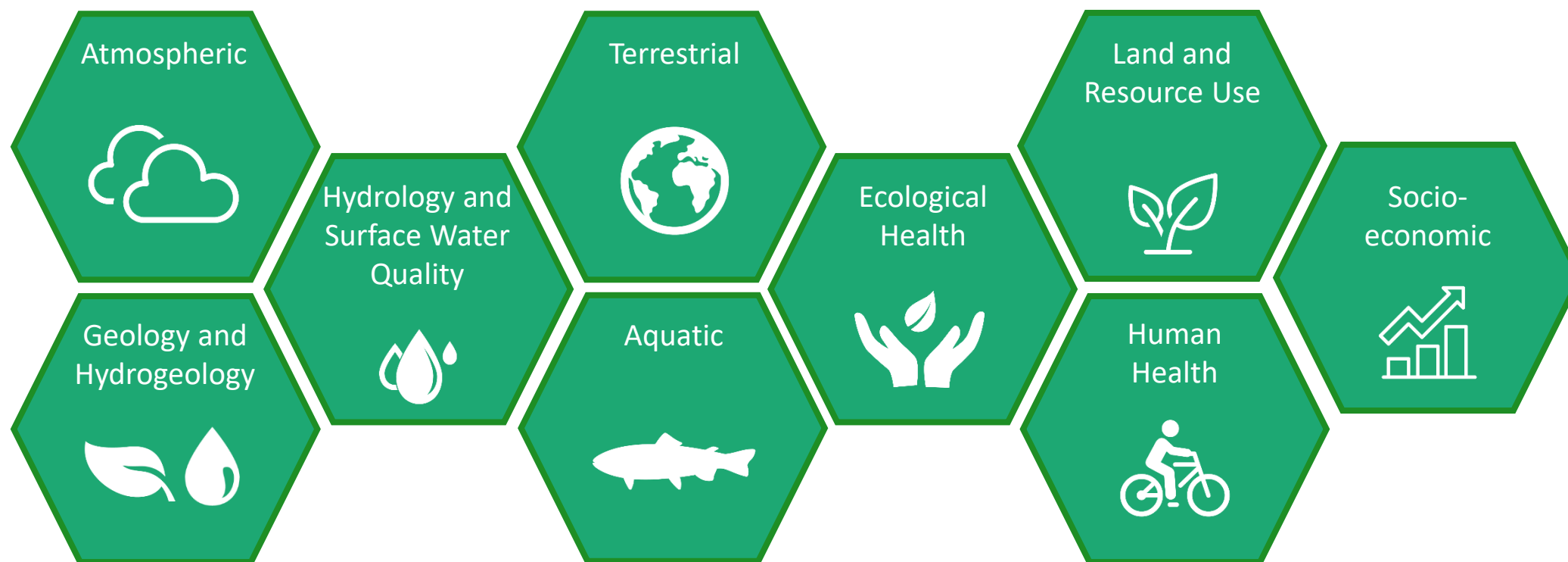




The proposed project will enhance
the level of protection of the Ottawa
River.

Comprehensive Environmental Assessment

Radiological and non-radiological effects are considered for all phases of the project for the following disciplines



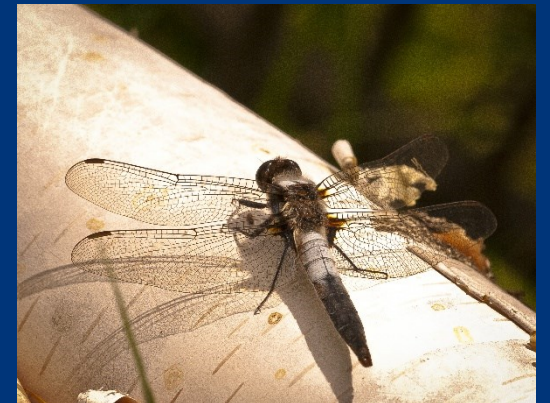
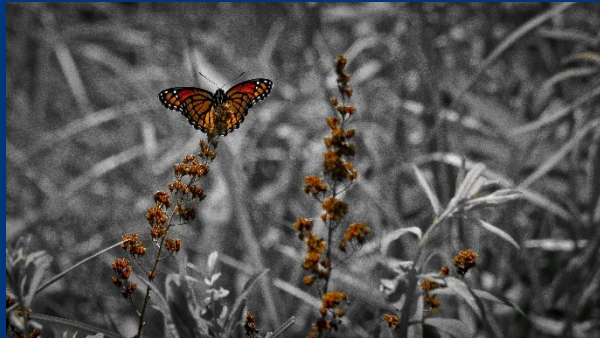


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Wildlife and Habitat Management





NSDF Environmental Assessment Follow-up Monitoring

-  Effluent, Environment, Groundwater Programs
-  Received public, stakeholder and Indigenous feedback on draft plan
-  Discussions have started on Indigenous involvement in monitoring



CNL's construction process provides the framework to ensure adequate control and documentation within approved safety margins and regulatory or statutory requirements.



Management
System



Human
Performance
Management



Operating
Performance



Safety
Analysis



Physical
Design



Conventional
Health and Safety



Environmental
Protection

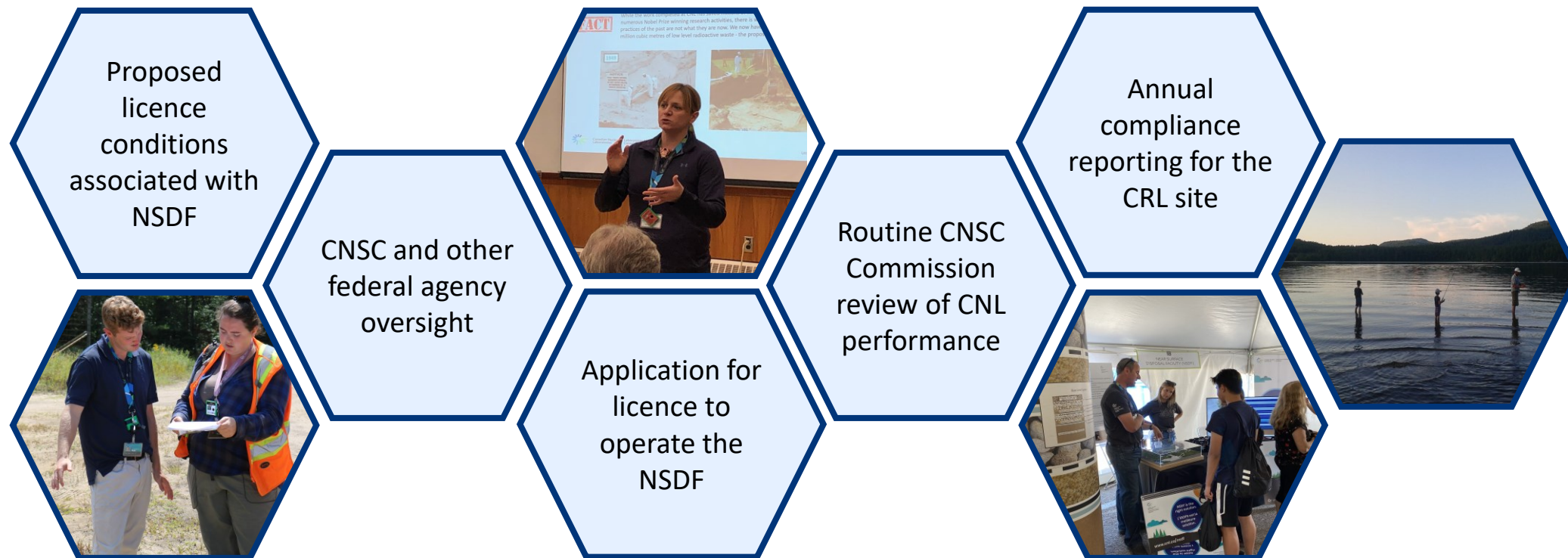


Emergency
Management and
Fire Protection









CNL is held accountable





Our commitments

-  We apply modern waste management standards and technologies to reduce risks associated with radioactive wastes.
-  We continue to engage with the public and Indigenous peoples and proactively address concerns.
-  We ensure the protection of human health and the environment during every phase of the project.
-  We carry out periodic reviews and updates of the safety case through all licensing stages.



Overall Conclusions



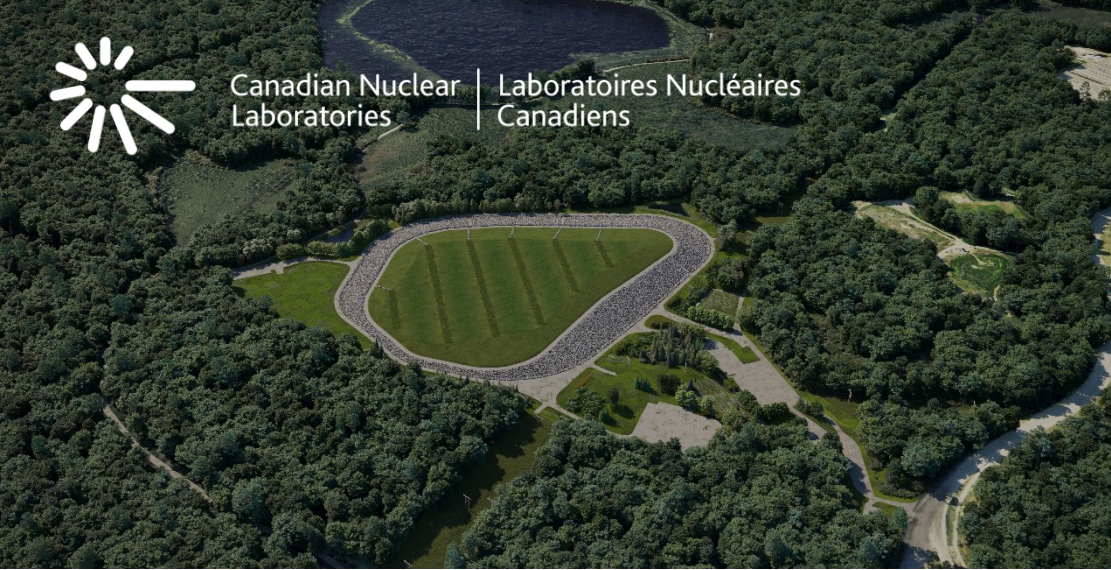
The proposed NSDF Project meets the requirements of the Canadian Environmental Assessment Act 2012 and is not likely to cause significant adverse environmental effects with the identified mitigations.



The NSDF meets the requirements of the Nuclear Safety and Control Act and all applicable regulations.



Engagement with Indigenous Nations, communities and organizations has been robust and meaningful, and has progressed significantly through the course of these proceedings to satisfy the Crown's duty to consult.





Meegwetch. Thank you. Merci.



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