



**NUCLEAR RESEARCH AND TEST ESTABLISHMENT  
OPERATING LICENCE**  
**CHALK RIVER LABORATORIES**

---

- I) LICENCE NUMBER:** **NRTEOL-01.00/2028**
- II) LICENSEE:** Pursuant to section 24 of the *Nuclear Safety and Control Act*, this licence is issued to:  
**Canadian Nuclear Laboratories Ltd.  
Laboratoires Nucléaires Canadiens Ltée  
286 Plant Road  
Chalk River, Ontario  
K0J 1J0**
- III) LICENCE PERIOD:** This licence is valid from April 1, 2018, to March 31, 2028 unless suspended in whole or in part, amended, revoked or replaced.
- IV) LICENSED ACTIVITIES:**  
This licence authorizes the licensee to operate the Chalk River Laboratories located in the Town of Deep River, County of Renfrew, Province of Ontario, as further detailed in paragraphs (a) to (d) below:
- (a) prepare a site for, construct, operate, modify, decommission or abandon a nuclear facility;
  - (b) possess, transfer, use or abandon a nuclear substance, prescribed equipment or prescribed information;
  - (c) produce, refine, convert, process, package, manage, store or dispose of a nuclear substance; and
  - (d) produce or service prescribed equipment.
- V) EXPLANATORY NOTES:**
- (a) Nothing in this licence shall be construed to authorize non-compliance with any other applicable legal obligation or restriction.
  - (b) Unless otherwise provided for in this licence, words and expressions used in this licence have the same meaning as in the *Nuclear Safety and Control Act* and associated regulations.

- (c) The Chalk River Laboratories Licence Conditions Handbook provides compliance verification criteria used to verify compliance with the conditions set out in this licence, including information regarding delegation of authority and applicable versions of documents and a process for version control of codes, standards or other documents that are used as compliance verification criteria.

## **VI) CONDITIONS:**

### **G. General**

G.1 The licensee shall conduct the activities described in Part IV of this licence in accordance with the licensing basis, defined as:

- (i) the regulatory requirements set out in the applicable laws and regulations;
- (ii) the conditions and safety and control measures described in the facility's or activity's licence and the documents directly referenced in that licence; and
- (iii) the safety and control measures described in the licence application and the documents needed to support that licence application;

unless otherwise approved in writing by the Canadian Nuclear Safety Commission (hereinafter “the Commission”).

G.2 The licensee shall give written notification of changes to the facility or its operation, including deviation from design, operating conditions, policies, programs and methods referred to in the licensing basis.

G.3 The licensee shall control the use and occupation of any land within the exclusion zone.

G.4 The licensee shall provide, at the nuclear facility and at no expense to the Commission, suitable office space for employees of the Commission who customarily carry out their functions on the premises of that nuclear facility (onsite Commission staff).

G.5 The licensee shall maintain a financial guarantee for decommissioning that is acceptable to the Commission or a person authorized by the Commission.

G.6 The licensee shall implement and maintain a public information and disclosure program.

### **1. Management System**

1.1 The licensee shall implement and maintain a management system.

### **2. Human Performance Management**

2.1 The licensee shall implement and maintain a human performance program.

2.2 The licensee shall implement and maintain a training program.

2.3 Persons appointed to the following positions shall be certified:

- (a) Senior Reactor Shift Engineer; and
- (b) NRU Health Physicist.

**3. Operating Performance**

- 3.1 The licensee shall implement and maintain an operating program, which includes a set of operating limits.
- 3.2 The licensee shall implement and maintain a program for reporting to the Commission or a person authorized by the Commission.

**4. Safety Analysis**

- 4.1 The licensee shall implement and maintain a safety analysis program.
- 4.2 The licensee shall implement and maintain a nuclear criticality safety program.

**5. Physical Design**

- 5.1 The licensee shall implement and maintain a design program.
- 5.2 The licensee shall implement and maintain a pressure boundary program and shall have in place a formal agreement with an authorized inspection agency.

**6. Fitness for Service**

- 6.1 The licensee shall implement and maintain a fitness for service program.

**7. Radiation Protection**

- 7.1 The licensee shall implement and maintain a radiation protection program, which includes a set of action levels. When the licensee becomes aware that an action level has been reached, the licensee shall notify the Commission within seven days.

**8. Conventional Health and Safety**

- 8.1 The licensee shall implement and maintain a conventional health and safety program.

**9. Environmental Protection**

- 9.1 The licensee shall implement and maintain an environmental protection program, which includes a set of action levels. When the licensee becomes aware that an action level has been reached, the licensee shall notify the Commission within seven days.

**10. Emergency Management and Fire Protection**

- 10.1 The licensee shall implement and maintain an emergency preparedness program.
- 10.2 The licensee shall implement and maintain a fire protection program.

**11. Waste Management**

- 11.1 The licensee shall implement and maintain a waste management program.
- 11.2 The licensee shall maintain a decommissioning plan.

**12. Security**

- 12.1 The licensee shall implement and maintain a security program.

**13. Safeguards and Non-Proliferation**

- 13.1 The licensee shall implement and maintain a safeguards program.

**14. Packaging and Transport**

- 14.1 The licensee shall implement and maintain a packaging and transport program.

SIGNED at OTTAWA, this 28<sup>th</sup> day of March, 2018.



Michael Binder, President  
on behalf of the Canadian Nuclear Safety Commission