



**URANIUM MINE LICENCE  
ORANO CANADA INC.  
McCLEAN LAKE OPERATION**

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**I) LICENCE NUMBER:** UML-MINEMILL-McCLEAN.02/2027

**II) LICENSEE:** Pursuant to section 24 of the *Nuclear Safety and Control Act*, this licence is issued to:

**Orano Canada Inc.  
100 – 833 45<sup>th</sup> Street West  
Saskatoon, Saskatchewan S7L 5X2**

**III) LICENCE PERIOD:** This licence is valid from July 1, 2017 to June 30, 2027, unless suspended, amended, revoked or replaced.

**IV) LICENSED ACTIVITIES:**

This licence authorizes the licensee to:

- a) operate and modify a nuclear facility (hereinafter, “the facility”) for the mining of uranium ore and the production of uranium concentrate at a site known as the McClean Lake Operation in the province of Saskatchewan, as shown on the drawing referenced in appendix A to this licence
- b) modify the outer perimeter of the JEB Tailings Management Facility for the vertical expansion up to 468 metres above sea level (mASL) and to accommodate disposal of tailings up to a consolidated tailings elevation of 462 mASL
- c) mine a nuclear substance (uranium ore)
- d) produce a uranium concentrate
- e) import, possess, use, store, transfer and dispose of nuclear substances and radiation devices that are required for or associated with laboratory studies, field studies, fixed gauge use and borehole logging devices.

**V) EXPLANATORY NOTES:**

- a) 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 its associated Regulations.
- b) The McClean Lake Operation Licence Conditions Handbook (LCH) identifies the criteria used to meet the conditions of this licence. The LCH also provides information regarding delegation of authority and document version control.

**VI) CONDITIONS:**

**G. GENERAL**

**G.1 Licensing Basis for Licensed Activities**

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
- (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 Notification of Changes**

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 Financial Guarantee**

The licensee shall maintain a financial guarantee for decommissioning that is acceptable to the Commission.

**G.4 Public Information and Disclosure**

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

## **1. *MANAGEMENT SYSTEM***

### **1.1 Management System**

The licensee shall implement and maintain a management system.

### **1.2 Management of Contractors**

The licensee shall ensure that every contractor working at the facility complies with this licence.

## **2. *HUMAN PERFORMANCE MANAGEMENT***

### **2.1 Training Program**

The licensee shall implement and maintain a training program.

## **3. *OPERATING PERFORMANCE***

### **3.1 Operations Program**

The licensee shall implement and maintain an operating program, which includes a set of operating limits.

### **3.2 Reporting Requirements**

The licensee shall implement and maintain a program for reporting to the Commission or a person authorized by the Commission.

### **3.3 Nuclear Substances and Radiation Devices**

The licensee shall implement and maintain a program for nuclear substances and radiation devices.

## **4. *SAFETY ANALYSIS***

### **4.1 Safety Analysis Program**

The licensee shall implement and maintain a safety analysis program.

## **5. *PHYSICAL DESIGN***

### **5.1 Design Program**

The licensee shall implement and maintain a design program.

## **6. *FITNESS FOR SERVICE***

### **6.1 Fitness for Service Program**

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

## **7. *RADIATION PROTECTION***

### **7.1 Radiation Protection Program**

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 24 hours.

## **8. *CONVENTIONAL HEALTH AND SAFETY***

### **8.1 Conventional Health and Safety Program**

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

## **9. *ENVIRONMENTAL PROTECTION***

### **9.1 Environmental Protection Program**

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 24 hours.

### **9.2 Reaching or Exceeding Effluent Discharge Limits**

The licensee shall, where the effluent concentration reaches or exceeds the discharge limits specified in the *Metal and Diamond Mining Effluent Regulations*<sup>[1]</sup>, as amended from time to time, immediately investigate and take corrective action to ensure that the effluent concentration is maintained below the discharge limits.

## **10. *EMERGENCY MANAGEMENT AND FIRE PROTECTION***

### **10.1 Emergency Preparedness Program**

The licensee shall implement and maintain an emergency preparedness program.

### **10.2 Fire Protection Program**

The licensee shall implement and maintain a fire protection program.

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<sup>[1]</sup> *Metal and Diamond Mining Effluent Regulations* (SOR/2002-222)

## ***11. WASTE MANAGEMENT***

### **11.1 Waste Management Program**

The licensee shall implement and maintain a waste management program.

### **11.2 Decommissioning Strategy**

The licensee shall implement and maintain a decommissioning strategy.

## ***12. SECURITY***

### **12.1 Security Program**

The licensee shall implement and maintain a security program.

## ***13. SAFEGUARDS AND NON-PROLIFERATION***

### **13.1 Safeguards Program**

The licensee shall implement and maintain a safeguards program.

## ***14. PACKAGING AND TRANSPORT***

### **14.1 Packaging and Transport Program**

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

SIGNED at OTTAWA, this 13th day of January, 2022.

**Velshi, Rumina**

Digitally signed by Velshi, Rumina  
DN: O=CA, O=GC, OU=CNSC-CCSN, CN=Velshi,  
Rumina  
Reason: I am the author of this document  
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Rumina Velshi, President  
on behalf of the Canadian Nuclear Safety Commission

## **APPENDIX A**

### **LOCATION OF THE McCLEAN LAKE OPERATION**

The location of the McClean Lake Operation is shown on McClean Lake Operation Drawing No. ML100-D-015 (e-Doc 5146834).

