

**URANIUM MINE DECOMMISSIONING LICENCE**  
**AREVA Resources Canada Inc.**  
**Cluff Lake Project**

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- I) LICENCE NUMBER:** UMDL-MINEMILL-CLUFF.00/2019
- II) LICENSEE:** Pursuant to section 24 of the *Nuclear Safety and Control Act* (hereinafter “the Act”), this licence is issued to:
- AREVA Resources Canada Inc.**  
**817 - 825 – 45<sup>th</sup> Street West**  
**P.O. Box 9204**  
**Saskatoon, SK S7K 3X5**
- III) LICENCE PERIOD:** This licence is valid from August 1, 2009 to July 31, 2019 unless otherwise suspended, amended, revoked, or replaced.
- IV) LICENSED ACTIVITIES:**
- This licence authorizes the licensee to:
- a) decommission a nuclear facility (hereinafter “the facility”). The facility consists of two underground mines, four open-pit mines, a mill, waste management systems, and associated site facilities, all in the Cluff Lake area of northern Saskatchewan, and more particularly described in Appendix A to this licence;
  - b) possess, manage and store nuclear substances that are required for, associated with or arise from the activities described in a);
  - c) possess and use prescribed equipment and prescribed information that are required for, associated with or arise from the activities described in a) and b); and

- d) modify the facility subject to condition 2.1

**V) CONDITIONS:**

The licensee shall comply with the following conditions, established pursuant to subsection 24(5) of the *Nuclear Safety and Control Act*.

**1. GENERAL**

- 1.1 The appendices attached to this licence form part of this licence;
- 1.2 Subject to any other condition of this licence, the activities at the facility shall be carried out in accordance with the policies, programs, and methods and for the purposes described in the documents listed in Appendix B to this licence;
- 1.3 The licensee shall ensure that every contractor working at the facility complies with the applicable conditions of this licence including those relating to the licensee's policies, programs, and procedures with respect to the protection of health, safety, environment, and, to maintenance of security; and
- 1.4 The licensee shall maintain a financial guarantee for decommissioning acceptable to the Commission or a person authorized by the Commission.

**2. MODIFICATIONS**

- 2.1 No significant modifications to, or deviations from, the design decommissioning conditions, policies, programs, and/or methods referred to in the document in Appendix B may be made without the prior written approval of the Commission or a person authorized by the Commission.

**3. ENVIRONMENTAL PROTECTION**

- 3.1 The licensee shall:
  - a) where the effluent concentration reaches or exceeds the discharge limits specified in Appendix C to this licence:
    - i) report to the Commission or a person authorized by the Commission within 24 hours the fact that the discharge limit has been reached or exceeded; and
    - ii) immediately investigate and take corrective action to ensure that effluent concentrations are maintained below the discharge limits;

- 3.2 The licensee shall, within 24 hours of becoming aware that an action level specified in the environmental protection Code of Practice has been reached, notify the Commission or a person authorized by the Commission;
- 3.3 The licensee shall, within 24 hours of becoming aware of a release of a hazardous substance into the environment, not authorized by the licence, report to the Commission or a person authorized by the Commission the location and circumstances of the situation, and any action that the licensee has taken or proposes to take with respect to it.

**4. *RADIATION PROTECTION***

- 4.1 The licensee shall, within 24 hours of becoming aware that the radiation protection action level specified in the Code of Practice has been reached, notify the Commission or a person authorized by the Commission that an action level specified in the Code of Practice has been reached.

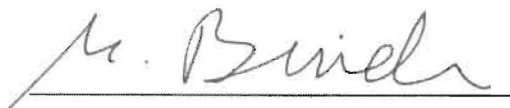
**5. *RECORDS/REPORTING***

- 5.1 The licensee shall issue the records required by subsection 5(1) of the *Radiation Protection Regulations* to:
- a) each person referred to in subsection 27(a) of the Act,
  - b) the Commission or a person authorized by the Commission, and
  - c) the National Dose Registry by March 31<sup>st</sup> of each year;
- 5.2 The licensee shall submit to the Commission or a person authorized by the Commission by March 31<sup>st</sup> of each year, a written Annual Report for the facility covering the previous calendar year;
- 5.3 The licensee shall submit the results of the environmental monitoring and Follow-up Program at a frequency and in a form acceptable to the Commission or a person authorized by the Commission; and
- 5.4 The licensee shall submit the results of the radiation monitoring program at a frequency and in a form acceptable to the Commission or a person authorized by the Commission.

**6. *SAFEGUARDS***

- 6.1 The licensee shall comply with the safeguards conditions contained in Appendix D to this licence.

DATED at OTTAWA, this 21<sup>st</sup> day of July 2009.

A handwritten signature in cursive script, appearing to read "M. Binder", is written over a horizontal line.

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



**APPENDIX B**

**REFERENCE DOCUMENTS**

Cluff Lake Project, Detailed Decommissioning Plan, Version 2, February 2009.

**APPENDIX C**

**AUTHORIZED EFFLUENT DISCHARGE LIMITS**

<b>Deleterious Substance</b>	<b>Maximum Authorized Monthly Mean Concentration</b>	<b>Maximum Authorized Concentration In a Composite Sample</b>	<b>Maximum Authorized Concentration In a Grab Sample</b>
Arsenic (mg/L)	0.50	0.75	1.00
Copper (mg/L)	0.30	0.45	0.60
Lead (mg/L)	0.20	0.30	0.40
Nickel (mg/L)	0.50	0.75	1.00
Zinc (mg/L)	0.50	0.75	1.00
Total Suspended Solids (mg/L)	15.00	22.50	30.00
Radium-226 (Bq/L)	0.37	0.74	1.11
Acid balance (as H <sub>3</sub> O <sup>+</sup> ) reported as pH	In a range of 6.0 to 9.5		
Acutely Lethal Effluent	0 %		

Notes:

1. Definition of Units:           mg/L = milligrams per litre  
  Bq/L = Becquerels per litre
2. All concentrations and activities are total values.
3. The above limits shall apply to all effluent discharged from the Secondary Treatment Pond A2 outlet.

4. “Monthly Mean Concentration” means the average value of the concentrations measured in all composite or grab samples collected from the final discharge point during each month when liquid effluent is released.
5. “Composite Sample” means:
  - i) a quantity of effluent consisting of not less than three equal volumes or three volumes proportionate to flow that have been collected at approximately equal time intervals over a period of not less than seven hours and not more than 24 hours; or
  - ii) a quantity of effluent collected continuously at a constant rate or at a rate proportionate to the rate of flow of the effluent over a sampling period of not less than seven hours and not more than 24 hours.
6. “Grab Sample” means a quantity of undiluted effluent collected at any given time.
7. “Acutely Lethal Effluent” means an effluent at 100% concentration that kills more than 50% of the rainbow trout subjected to it over a 96-hour period when tested in accordance with the acute lethality test.



## APPENDIX D

### SAFEGUARDS LICENCE CONDITIONS

1. The licensee shall take all necessary measures to facilitate Canada's compliance with any applicable safeguards agreement.
2. The licensee shall provide the International Atomic Energy Agency, an International Atomic Energy Agency inspector, or a person acting on behalf of the International Atomic Energy Agency, with such reasonable services and assistance as are required to enable the International Atomic Energy Agency to carry out its duties and functions pursuant to a safeguards agreement.
3. The licensee shall grant prompt access at all reasonable times to all locations at the facility to an International Atomic Energy Agency inspector, or to a person acting on behalf of the International Atomic Energy Agency, where such access is required for the purposes of carrying on an activity pursuant to a safeguards agreement. In granting access, the licensee shall provide health and safety services and escorts as required in order to facilitate activities pursuant to a safeguards agreement.
4. The licensee shall disclose to the Commission or a person authorized by the Commission, to the International Atomic Energy Agency or to an International Atomic Energy Agency inspector any records that are required to be kept or any reports that are required to be made under a safeguards agreement.
5. The licensee shall provide such reasonable assistance to an International Atomic Energy Agency inspector, or to a person acting on behalf of the International Atomic Energy Agency, as is required to enable sampling and removal or shipment of samples required pursuant to a safeguards agreement.
6. The licensee shall provide such reasonable assistance to an International Atomic Energy Agency inspector, or to a person acting on behalf of the International Atomic Energy Agency, as is required to enable measurements, tests and removal or shipment of equipment required pursuant to a safeguards agreement.
7. The licensee shall not interfere with, alter, deface or break a safeguards seal, except pursuant to a safeguards agreement.
8. The licensee shall implement measures to prevent damage to, or the theft, loss or sabotage of samples collected pursuant to a safeguards agreement or the illegal use, possession or removal of such samples.

**APPENDIX D (Cont'd.)**

**SAFEGUARDS LICENCE CONDITIONS**

9. The licensee shall make such reports and provide such information to the Commission or a person authorized by the Commission as are required to facilitate Canada's compliance with any applicable safeguards agreement.