1. Prohibition of Human Use
   This licence does not authorize the use of nuclear substances in or on human beings.
   (2696-0)

2. Laboratory Lists
   The licensee shall maintain a list of all areas, rooms and enclosures in which more than one exemption quantity of a nuclear substance is used or stored.
   (2569-1)

3. Laboratory Procedures
   The licensee shall post and keep posted, in a readily visible location in areas, rooms or enclosures where nuclear
   Environmental Health & Safety posting.
   Please DO NOT REMOVE.
substances are handled, a radioisotope safety poster approved by the Commission or a person authorized by the Commission, which corresponds to the classification of the area, room or enclosure.

(2570-3)

4. Storage
   The licensee shall:
   (a) ensure that when in storage radioactive nuclear substances or radiation devices are accessible only to persons authorized by the licensee;
   (b) ensure that the dose rate at any occupied location outside the storage area, room or enclosure resulting from the substances or devices in storage does not exceed 2.5 microSv/h; and
   (c) have measures in place to ensure that the dose limits in the Radiation Protection Regulations are not exceeded as a result of the substances or devices in storage.

(2575-2)

5. Area Classification
   The licensee shall classify each room, area or enclosure where more than one exemption quantity of an unsealed nuclear substance is used at a single time as:
   (a) basic-level if the quantity does not exceed 5 ALI,
   (b) intermediate-level if the quantity used does not exceed 50 ALI,
   (c) high-level if the quantity does not exceed 500 ALI,
   (d) containment-level if the quantity exceeds 500 ALI; or
   (e) special purpose if approved in writing by the Commission or a person authorized by the Commission.
   Except for the basic-level classification, the licensee shall not use unsealed nuclear substances in these rooms, areas or enclosures without written approval of the Commission or a person authorized by the Commission.

(2108-3)

6. Contamination Meter Requirements
   The licensee shall make available to workers at all times at the site of the licensed activity a properly functioning portable contamination meter.

(2572-1)

7. Survey Meter Requirements
   The licensee shall provide at all times where nuclear substances, except for Hydrogen-3 and Nickel-63, are handled or stored a radiation survey meter.

(2058-1)

8. Contamination Criteria
   The licensee shall ensure that for nuclear substances listed in the Appendix: Classes of Radionuclides, attached to this licence:
   (a) non-fixed contamination in all areas, rooms or enclosures where unsealed nuclear substances are used or stored does not exceed:
      (i) 3 becquerels per square centimetre for all Class A radionuclides;
      (ii) 30 becquerels per square centimetre for all Class B radionuclides; or
      (iii) 300 becquerels per square centimetre for all Class C radionuclides; averaged over an area not exceeding 100 square centimetres; and
   (b) non-fixed contamination in all other areas does not exceed:
      (i) 0.3 becquerels per square centimetre for all Class A radionuclides;
      (ii) 3 becquerels per square centimetre for all Class B radionuclides; or
      (iii) 30 becquerels per square centimetre for all Class C radionuclides; averaged over an area not exceeding
100 square centimetres.

(2642-10)

9. Thyroid Monitoring
(a) Every person who in any 24-hour period uses a total quantity of Iodine 124, Iodine-125 or Iodine-131 exceeding:
   (i) 2 MBq in an open room;
   (ii) 200 MBq in a fume hood;
   (iii) 20,000 MBq in a glove box; or
   (iv) any approved quantity in any room, area or enclosure authorized in writing by the CNSC
shall undergo thyroid screening within a period more than 24 hours after the last use that resulted in any of the
above limits being exceeded and less than 5 days after the limit was exceeded.
(b) Every person who in any 24-hour period uses a total quantity of Iodine-123 exceeding:
   (i) 200 MBq in an open room;
   (ii) 20,000 MBq in a fume hood;
   (iii) 2,000,000 MBq in a glove box; or
   (iv) any approved quantity in any room, area or enclosure authorized in writing by the CNSC
shall undergo thyroid screening within a period more than 8 hours after the last use that resulted in any of the above
limits being exceeded and less than 48 hours after the limit was exceeded.
(c) Every person who is involved in a spill greater than 2 MBq of Iodine-124, Iodine-125 or Iodine-131 or on whom
external contamination is detected, shall undergo thyroid screening within a period more than 24 hours after the spill
and less than 5 days after the spill or contamination.
(d) Every person who is involved in a spill of greater than 200 MBq of Iodine-123 or on whom external contamination
is detected, shall undergo thyroid screening within a period more than 8 hours after the spill and less than 48 hours
after the spill or contamination.

(2046-17)

10. Thyroid Screening
Screening for internal Iodine-123, Iodine 124, Iodine-125 and Iodine-131 shall be performed using:
(a) a direct measurement of the thyroid with an instrument that can detect 1 kBq of Iodine-124, Iodine-125 or
Iodine-131, or 10 kBq of Iodine-123; or
(b) a bioassay procedure approved by the Commission or a person authorized by the Commission.

(2600-4)

11. Thyroid Bioassay
If thyroid screening detects more than 10 kBq of Iodine-124, Iodine-125, Iodine-131 or 100 kBq of Iodine-123 in the
thyroid, the licensee shall immediately make a preliminary report to the Commission or a person authorized by the
Commission and have bioassay performed within 24 hours by a person approved by the Commission to provide internal
dosimetry.

(2601-7)

12. Extremity Dosimetry - Beta Emitters
The licensee shall ensure that any person who handles a container which contains more than 50 MBq of phosphorus 32,
strontium 89, yttrium 90, samarium 153 or rhenium 186 wears a ring dosimeter. The dosimeters must be supplied and read
by a dosimetry service licensed by the Commission.

(2578-1)

13. Internal Authorization
The licensee shall ensure that:
(a) internal authorizations are issued in accordance with the licensee's internal authorization policies and procedures approved by the Commission or a person authorized by the Commission; and
(b) internal authorization forms are posted in a readily visible location in or near each room, area or enclosure where nuclear substances and radiation devices are used or stored.
(c) the licensed activity is conducted in accordance with the terms and conditions of the internal authorization.
(2215-4)

14. Project Approval
The licensee shall obtain written approval from the Commission or a person authorized by the Commission before starting any work requiring the use of more than 10,000 exemption quantities of a nuclear substance at a single time.
(2214-0)

15. Disposal (General)
When disposing of unsealed nuclear substances set out in column 1 of the Appendix: Disposal Limits to municipal waste, to sewer systems or to atmosphere, the licensee shall ensure that the concentration limit set out for each nuclear substance is not exceeded.
(a) The concentration limits set out in column 2 apply to quantities of solid waste of less than three tonnes per building per year. Nuclear substances released to the municipal garbage system must be in solid form and uniformly distributed in the waste with a concentration that is less than the limits in column 2. Where more than one nuclear substance is disposed of at one time, the sum of the quotients obtained by dividing the quantity of each substance by its corresponding limit in column 2 shall not exceed one.
(b) The limits set out in Column 3 apply to the water soluble liquid form of each nuclear substance which may be disposed of per building per year. Where more than one nuclear substance is disposed of at one time, the sum of the quotients obtained by dividing the quantity of each substance by its corresponding limit in column 3 shall not exceed one.
(c) The concentration limits set out in Column 4 may be averaged over a one-week period and apply to releases of less than 3 million cubic metres per year. Where more than one nuclear substance is disposed of at one time, the sum of the quotients obtained by dividing the quantity of each substance by its corresponding limit in column 4 shall not exceed one.
(2160-12)

16. Decommissioning
The licensee shall ensure that prior to decommissioning any area, room or enclosure where the licensed activity has been conducted:

(a) the non-fixed contamination for nuclear substances listed in the licence application guide table titled "Classification of Radionuclides" does not exceed:
   (i) 0.3 becquerels per square centimetre for all Class A radionuclides;
   (ii) 3 becquerels per square centimetre for all Class B radionuclides; and
   (iii) 30 becquerels per square centimetre for all Class C radionuclides; averaged over an area not exceeding 100 square centimetres;
(b) the release of any area, room or enclosure containing fixed contamination, is approved in writing by the Commission or person authorized by the Commission;
(c) all nuclear substances and radiation devices have been transferred in accordance with the conditions of this licence; and
17. Operation Limitations
Subject to any other condition of this licence and unless otherwise permitted by the prior written approval of the Commission or a person authorized by the Commission, the licensee shall carry out the licensed activities in accordance with the documents or parts thereof referred to in the Appendix: Licence Document(s).

18. Inaccuracies Notification
The licensee shall report to the Commission or a person authorized by the Commission, as soon as is practicable, the discovery of any inaccuracy or incompleteness in the documents referred to in the Appendix: Licence Document(s).

19. Financial Guarantee
The licensee shall, as of April 1, 2015, maintain at all times a financial guarantee in respect of the activities authorized by this licence of a value set by the Commission and in a form acceptable to the Commission.

20. Import and Export Restrictions
This licence does not authorize the licensee to import or export the following items as described in the schedule, Parts A and B, to the Nuclear Non-proliferation Import and Export Control Regulations, subject to any restrictions or exemptions as noted in each paragraph of the schedule:

1. Special fissionable material, as described in paragraph A.1.1:
   (i) Plutonium;
   (ii) Uranium 233;
   (iii) Uranium enriched in Uranium 233 or Uranium 235.
2. Source material, as described in paragraph A.1.2:
   (i) Uranium, containing the mixture of isotopes that occurs in nature;
   (ii) Uranium, depleted in the isotope Uranium 235;
   (iii) Thorium.
3. Deuterium and heavy water, as described in paragraph A.1.3.
4. Tritium, as described in paragraph A.1.5.
5. Alpha-emitting nuclear substances, as described in paragraph B.1.1.1, including but not limited to:
   (i) Actinium 225, 227;
   (ii) Californium 248, 250, 252, 253, 254;
   (iii) Curium 240, 241, 242, 243, 244;
   (iv) Einsteinium 252, 253, 254, 255;
   (v) Fermium 257;
   (vi) Gadolinium 148;
   (vii) Mendelevium 258, 260;
   (viii) Neptunium 235;
   (ix) Polonium 208, 209, 210;
   (x) Radium 223.
6. Radium-226, as described in paragraph B.1.1.16.

21. Sealed Source Security Requirements
The licensee shall implement the security measures for sealed sources as set out in Regulatory Document REGDOC-2.12.3, Security of Nuclear Substances: Sealed Sources, as amended from time to time:

a) by no later than May 31, 2015, for Category 1 and 2 sealed sources, and  
b) by no later than May 31, 2018, for Category 3, 4 and 5 sealed sources.  
The sealed source categories are specified in REGDOC-2.12.3.  
(2490-1)

22. Location Notification  
The licensee shall, for any site where licensed activities are to be conducted for more than 90 consecutive days, notify the Commission in writing of the site within 7 days of starting to conduct the activities at the site. The licensee shall notify the Commission in writing within 7 days of the discontinuance of licensed activities at any site. The continuity of consecutive days is not broken during off site use or off site temporary storage.  
(2300-2)

23. Records Requirements - Portable Devices  
The licensee shall ensure that a copy of the prescribed records and operating procedures specific to the site where licensed activities are conducted for more than 90 consecutive days is maintained at that site. The continuity of consecutive days is not broken during off site use or off site temporary storage.  
(2350-4)

The licensee shall, by September 30 of each year, submit to the Commission a written annual compliance report in the form specified at www.nuclearsafety.gc.ca/acr.  
(2912-3)

Designated Officer pursuant to paragraph 37(2)(c) of the Nuclear Safety and Control Act