



Radiotherapy Licence Application Form

Section A – Applicant

A1 Type of request

- Construction Renewal Operating to commission Decommissioning
 Routine operation (amendment) Current licence # _____

A2 Language of licence

- English French Both

A3 Applicant information

Applicant: _____

Corporate number (if applicable): _____

Canadian head office address:

Street: _____

City: _____ Province: _____ Postal Code: _____

Mailing Address (if different from above):

Street: _____

City: _____ Province: _____ Postal Code: _____

A4 Access to licensee information

Is any part of this application subject to a request for exemption from the CNSC policy on public access to licensing information?

- Yes No

(Note: If Yes, attach details of request for exemption)

A5 Contact person for billing of cost recovery fees

Name: _____ Title: _____

Telephone: _____ Facsimile: _____

Email: _____ Not applicable

A6 Proof of legal status

Business Number: _____

- Incorporated Company Public Institution Sole Proprietorship

Append proof of applicant's incorporation, registration or charter (specify the appendix name and number).

For public institutions, specify the enabling legislation (act): _____

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Section B – Licensed Use Type, Activities and Locations

B1 Licensed use types

Indicate only one prescribed equipment use type. A separate application is needed for each.

- Accelerator
- Teletherapy
- Brachytherapy remote afterloader – high dose rate (HDR)
- Brachytherapy remote afterloader – low dose rate (LDR)
- Brachytherapy remote afterloader – intravascular brachytherapy (IVB)*

*(applies to afterloaders using only pure β- emitters (e.g., Sr-90 or P-32))

B2 Licensed activities

Check as many activities as you intend to conduct in association with the nuclear substances that are associated with or arise from the your selected prescribed equipment use type

- Possess Store Transfer Import Export
- Other: _____

B3 Principal location of use and/or storage

Building: _____ Room # _____

Street: _____

City: _____ Province: _____ Postal Code: _____

used at stored at both

B4 Other locations of use and/or storage

Building: _____

Street: _____

City: _____ Province: _____ Postal Code: _____

Room # _____ used at stored at both

Room # _____ used at stored at both

Room # _____ used at stored at both

Room # _____ used at stored at both

Room # _____ used at stored at both

More locations appended as: _____

Section C – Nuclear Substances and Prescribed Equipment

C1 Class II prescribed equipment If more space is required, please submit on a separate sheet.

A. Medical accelerators

Manufacturer	Model name and number	CNSC certificate number	Serial number (if available)	Types of beam and output energies of the accelerator	Location (room number)

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B. Teletherapy or brachytherapy machines

Manufacturer	Model name and number	CNSC certificate number	Device serial number	Name or symbol and mass number of nuclear substance	Maximum activity of nuclear substance in device	Source model number	Source serial number (if available)

C2 Sealed sources which are *not* incorporated into Class II prescribed equipment

(e.g., replacement sources or check sources)

Manufacturer	Model name and number	Name or symbol and mass number of nuclear substance	Maximum activity of nuclear substance (per source)	Serial number

Section D – Radiation Safety Program

D1 Radiation safety officer (RSO)

(Please print)

Name: _____ Title: _____
Telephone: _____ Facsimile: _____
Email: _____ RSO certificate number: _____
Description of RSO's qualifications and experience is appended as: _____

D2 RSO Acknowledgement

I accept the responsibilities described in the job description noted in Subsection D3 below.

Date: ____/____/____ Signature: _____
 YYYY MM DD

D3 Radiation safety officer – job description

Append the applicant's RSO job description.

Appended as: _____

D4 Designated supervising physician (DSP)

(Please print)

Name: _____ Title: _____
Telephone: _____ Facsimile: _____
Email: _____
Description of DSP's qualifications and experience is appended as: _____

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D5	DSP Acknowledgement
I accept the designation of supervising physician.	
Date: _____ / _____ / _____ Signature: _____ <small> YYYY / MM / DD</small>	
D6	Organizational management structure
Append a description of the internal allocation of functions, responsibilities and authority of the radiation safety management structure.	
Appended as: _____	
D7	Terms of reference for the radiation safety committee (if applicable)
Append a copy of the terms of reference or the mandate for radiation safety of the "Radiation Safety Committee (RSC)" or equivalent "Health and Safety Subcommittees" in your organization.	
Appended as: _____	
D8	Radiation detection instruments
Append a list of all radiation detection instruments with their operating characteristics and intended use.	
Appended as: _____	
Section E – Radiation Safety Policies and Procedures	
E1	As low as reasonably achievable (ALARA)
Append a copy of your organization's policies and procedures to ensure that radiation exposure is ALARA.	
Appended as: _____	
E2	Action levels
Append a copy of your organization's policies and procedures regarding action levels.	
Appended as: _____	
E3	Worker qualifications, experience, training and authorization
Append a copy of your organization's policies and procedures which state that only trained workers may handle nuclear substances and attach a detailed description of the qualifications of workers and the proposed in-house training program.	
Appended as: _____	
E4	Nuclear energy workers designation policy
Append a copy of your organization's policies and procedures which designate workers as nuclear energy workers (NEWs) and which provide customized instructions to them.	
Appended as: _____	
E5	Personal dose monitoring
Append a copy of your organization's policies and procedures for external dose monitoring	
Appended as: _____	
E6	Posting
Append a copy of your organization's policies and procedures for restricting the use and storage of nuclear substances to authorized rooms only, including posting of these rooms.	
Appended as: _____	
E7	Decommissioning
Append a copy of the preliminary decommissioning plan for the Class II nuclear facility.	
Appended as: _____	

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E8	Access control and security
<p>Append a copy of your organization's policies and procedures which restrict any access to nuclear substances and prescribed equipment to authorised workers.</p> <p>Appended as: _____</p>	
E9	Inventory control and records
<p>Append a copy of your organization's policies and procedures for inventory control.</p> <p>Appended as: _____</p>	
E10	Receipt of packages
<p>Append a copy of your organization's policies and procedures for receiving shipments of nuclear substances.</p> <p>Appended as: _____</p>	
E11	Waste disposal of nuclear substances
<p>Append a copy of your organization's policies and procedures for handling and disposing of waste containing nuclear substances.</p> <p>Appended as: _____</p>	
E12	Source changes for class II prescribed equipment
<p>Append a copy of your organization's policies and procedures for source changes.</p> <p>Appended as: _____</p>	
E13	Maintenance and use of portable radiation detection instruments
<p>Append a copy of your organization's policy for the maintenance and calibration of portable radiation detection meters.</p> <p>Appended as: _____</p>	
Section F- Licence Renewals (to be completed only when renewing an existing licence)	
F1	Radiation dose summary
<p>Append a report summarizing the past year's external (TLD) radiation dosimetry results for all of the licensee's monitored workers.</p> <p>Appended as: _____</p>	
F2	Sealed sources acquired
<p>List all sealed nuclear substances acquired during the last year, with serial numbers and assay details.</p> <p>Appended as: _____</p>	
F3	Disposal or transfer of sealed sources
<p>Append a summary of the annual quantity of radioactive waste which has been disposed of or transferred over the last year.</p> <p>Appended as: _____</p>	
F4	Incidents
<p>Append a brief description of any unplanned events or incidents which happened within the last year.</p> <p>Appended as: _____</p>	

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F5	Occupancy review
Append an update of the description, occupancy and classification of the areas adjacent to the facility.	
Appended as: _____	
F6	Operating workload
Append a summary of the operating workload for the facility for the past year.	
Appended as: _____	
F7	Radiation survey
Append a copy of the most recent radiation survey of the facility.	
Appended as: _____	
Section G – Facility Planning and Design Parameters	
G1	Site control
Append proof of ownership or authorization to build on the proposed site and a description of the facility restrictions and public notification program.	
Appended as: _____	
G2	Nuclear facility plans and drawings
Append the plans and elevation drawings with the required information listed in Subsection G2 of the guide.	
Appended as: _____	
G3	Description, occupancy and classification of adjacent areas
Append the classification and occupancy factors of the adjacent areas based on the planned use of each area. Include the areas above and below the treatment room.	
Appended as: _____	
G4	Class II prescribed equipment design workload
Append an estimate of the projected workload for the facility. For accelerators, include both the dose delivered in the primary beam and the number of Monitor Units (MUs) delivered.	
Appended as: _____	
G5	Dose rate and annual dose calculations for adjacent areas
Append detailed calculations which estimate the dose rates and annual doses expected in all areas adjacent to the facility. The calculations should take into account the facility workload, shielding design, and the usage and occupancy of surrounding areas.	
Appended as: _____	
G6	Other design considerations
Append a description of the proposed shielding verification methods and, for accelerators, a description and analysis of the room ventilation.	
Appended as: _____	
SECTION H – Safety System Requirements	
H1	Door/entrance interlocks
Append a detailed description of the door or entrance interlocks and their function, including wiring schematics.	
Appended as: _____	

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H2	Warning lights
<p>Append a detailed description of the warning lights and indicate their locations on the plans of the treatment room submitted in G2.</p> <p>Appended as: _____</p>	
H3	Radiation warning system
<p>If applicable, append a detailed description of the radiation warning system and its function. Indicate its location on the plans of the treatment room submitted in G2.</p> <p>Appended as: _____</p>	
H4	Emergency off buttons
<p>Append a description of the design and function of the emergency stop buttons both inside and outside the treatment room. Indicate their locations on the plans of the treatment room submitted in G2.</p> <p>Appended as: _____</p>	
H5	Beam stops
<p>If applicable, append a description of the methods used to limit the primary beam orientation.</p> <p>Appended as: _____</p>	
H6	Viewing system
<p>Append a description of the viewing system used to monitor the patient during treatment.</p> <p>Appended as: _____</p>	
H7	Warning signs
<p>Append a description of the size and location of the radiation warning signs to be posted at the facility.</p> <p>Appended as: _____</p>	
H8	Tools and equipment for stuck source emergencies
<p>If applicable, append a description of the emergency tools and equipment which will be kept available whenever the Class II prescribed equipment is in use.</p> <p>Appended as: _____</p>	
SECTION I – Class II Nuclear Facility Operating Licence for Commissioning	
I1	Confirmation of facility design
<p>Provide confirmation that the shielding was constructed according to the plans submitted in your application for a licence to construct this facility and; if applicable, measurements demonstrating that the room ventilation rate meets design specifications.</p> <p>Appended as: _____</p>	
I2	Commissioning plans
<p>Append the required information related to planning your commissioning activities as listed in subsection I2 of the guide.</p> <p>Appended as: _____</p>	
I3	Safety device tests
<p>Append a detailed description of the proposed performance tests for the safety systems listed in section H.</p> <p>Appended as: _____</p>	

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I4	Radiation survey
<p>Append your plan for performing the initial radiation survey of the facility.</p> <p>Appended as: _____</p>	
SECTION J – Class II Nuclear Facility Routine Operation Licence	
J1	Results of safety system tests
<p>Append the results of the functionality tests performed on your safety systems.</p> <p>Appended as: _____</p>	
J2	Results of radiation survey
<p>Append the results of your initial radiation survey performed during commissioning.</p> <p>Appended as: _____</p>	
J3	Overview of facility operation
<p>Append the procedures governing use of the facility as outlined in subsection J3 of the guide.</p> <p>Appended as: _____</p>	
J4	Basic operating instructions for Class II prescribed equipment
<p>Append the basic operating procedures for the Class II Prescribed Equipment listed in subsection J4 of the guide.</p> <p>Appended as: _____</p>	
J5	Quality assurance program
<p>Append a description or a copy of those elements of the quality assurance program for your facility which cover the topics listed in subsection J5 of the guide.</p> <p>Appended as: _____</p>	
J6	Special requirements for facilities which do not have a Class II prescribed equipment servicing licence
<p>Append your policies and procedures for routine maintenance and interlock bypass.</p> <p>Appended as: _____</p>	
J7	Special instructions for nursing staff at LDR brachytherapy facilities
<p>Append the safety instructions that you will provide to nursing staff who are caring for patients with LDR brachytherapy implants; including the instructions for dealing with inadvertent interruption of treatments and response to medical emergencies:</p> <p>Appended as: _____</p>	
J8	Records and reporting system
<p>Append the policies and procedures that ensure that required records are kept and that reports will be provided as required.</p> <p>Appended as: _____</p>	
SECTION K – Licence for Decommissioning (Accelerators Only)	
K1	Overview of decommissioning plan
<p>Provide an overview of your proposed decommissioning process, including the facilities and equipment affected, the tentative schedule and the proposed state of the site upon completion.</p> <p>Appended as: _____</p>	

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