Republic of the Philippines
Department of Science and Technology
PHILIPPINE NUCLEAR RESEARCH INSTITUTE
Commonwealth Avenue, Diliman, Quezon City

APPLICATION FOR A RADIOACTIVE MATERIAL LICENSE (BRACHYTHERAPY)

INSTRUCTIONS: To complete this application, refer to Part 14 of the Code of PNRI Regulations and the corresponding Regulatory Guide for the Preparation of Application for the Medical Use of Radioactive Material in Brachytherapy. Submit an original and one copy of the completed application, with the specified license fee and all required attachments, to the Nuclear Regulations, Licensing, and Safeguards Division of the Philippine Nuclear Research Institute, Commonwealth Avenue, Diliman, Quezon City.

This is an application for: (Check appropriate box)

☐ A. NEW LICENSE
☐ B. AMENDMENT TO LICENSE NO. _____
☐ C. RENEWAL OF LICENSE NO. _____

1. NAME AND MAILING ADDRESS OF APPLICANT/LICENSEE

(Attach copy of SEC registration and business permit issued by the responsible government agency.)

Institution/Hospital: _____
Address: _____
Director/Head of the Institution: _____
Telephone Number: _____
Mobile Phone No.: _____
Fax Number: _____
E-Mail Address: _____

2. PERSON TO BE CONTACTED ABOUT THIS APPLICATION

Name _____
Position/Title: _____
Address: _____
Telephone Number: _____
Mobile Phone No.: _____
Fax Number: _____
E-Mail Address: _____

3. RADIOACTIVE MATERIAL AND PURPOSE OF USE

Isotope (Element/ Mass Number)	Manufacturer	Date of Manufacture	Date of Purchase	Source Model/ Serial Number	No. of Sealed Sources	Maximum Activity in each Sealed Source	Purpose of Use

4. LOCATION(S) OF USE (Attach location map or building plan.)

Address (Department/Section, Room No., Building): _____
Telephone Number: _____
Fax Number: _____
E-Mail Address: _____

5. PROPOSED WORKERS (Accomplish Attachments A, B, C and D for the training and experience of each person named below and submit certificates of relevant trainings).

Worker	Name	Position/Title	Other Affiliated Institutions
Authorized Users (Physicians)	_____ _____ _____	_____ _____ _____	_____ _____ _____
Medical Physicist			
Radiation Safety Officer (RSO)			
Assistant RSO			
Radiotherapy Technologists	_____ _____ _____	_____ _____ _____	_____ _____ _____

6. REPRESENTATION IN THE RADIATION SAFETY COMMITTEE. List the names of the members that compose the committee and their position or designation in the Institution, educational degree, address (department, building, room number) in the hospital, and telephone number. Use separate sheet.

7. FACILITIES (Use separate sheets if necessary).

Description of the Facility. Describe the facilities and submit annotated plans and drawings or sketches of rooms where radioactive material will be used and stored, indicating wall thickness, materials of construction, shielding, conduits or ventilation ducts. Describe the viewing systems, warning systems and safety interlock systems and adjacent areas.

Description of Isolation Room for Radioactive Patients. Describe the isolation room and provide a sketch of the room showing bed location, toilet and bathroom, dimensions, materials of construction, wall thickness, provisions for ventilation and description and level of occupancy of the adjacent areas. Provide dose rate and shielding calculations.

8. EQUIPMENT/INSTRUMENTS/DEVICES

8.1 Equipment

(a) **For Remote After-Loading Brachytherapy Unit.**

Type of radioactive source: _____
Manufacturer of the equipment: _____
Date of manufacture: _____
Model number of the equipment: _____
Serial number of the equipment: _____
Date of purchase: _____
Name & Address of institution who will provide repair and maintenance service on the equipment: _____
Power output of the machine: _____
Equipment features such as alarms, electrical interlocks, and automatic source withdrawal interlock: _____
International standards to which the equipment and sources conform (e.g., IEC, ISO): _____

(b) **For Manual After-Loading Device**

Source storage and transport container: _____
Source handling devices and accessories (such as tongs, lead containers, etc.): _____
Radiation protection barrier during manual source loading in patient: _____

8.2 Radiation Detection/Measurement Survey Instruments

Type of Instrument	**Model No./ Serial No.**	**Manufacturer**	**Radiation Detected** (α,β,γ, etc.)	**Sensitivity Range** (mSv/h)	**Window Thickness** (mm)	**Intended Use**	**Date of Initial Use**

8.3 Personnel Monitoring Devices

☐ Film Badge No. of Units _____
☐ TLD No. of Units _____
☐ Pen Dosimeter No. of Units _____
☐ Others No. of Units _____

9. RADIATION SAFETY PROGRAM. (Check appropriate space and attach the required information. Additional specific procedures may be required as may be deemed necessary.)

		Description Attached	Remarks
9.1	ALARA Program	☐	
9.2	RSC Duties & Responsibilities	☐	
9.3	RSO Authorities, Duties and Responsibilities	☐	
9.4	Training Program	☐	
9.5	Personnel Monitoring Program	☐	
9.6	Calibration of Survey Instruments	☐	
9.7	Leak Test Program	☐	
9.8	Radiation Survey Program	☐	
9.9	Operating Procedures	☐	
9.10	Radiation Control Procedures		
	– Procedure for Release of Patients with Permanent Implants	☐	
	– Procedure for Release of Patients with Temporary Implants	☐	
	– Procedure for Control of Public Exposure	☐	
	– Procedure for Visitor Control	☐	
9.11	Emergency Procedures	☐	
9.12	Decommissioning Plan	☐	

10. SECURITY OF SEALED SOURCES. For Category 2 sources, submit a Security Plan in accordance with CPR Part 26; for Category 4 & 5 sources, e.g., Cs-137 and I-125, submit security measures.

11. MANAGEMENT OF DISUSED SEALED SOURCES. Submit a detailed description of methods of disposal of disused sealed sources. If disused sealed sources are to be returned to original supplier or manufacturer, submit a copy of agreement with the original supplier or manufacturer.)

12. APPLICATION FEE _____ Official Receipt No. _____
Date: _____

LICENSE FEE _____ Official Receipt No. _____
Date: _____

13. CERTIFICATION.

The applicant understands that all statements and representations made in this application are binding upon the applicant. The applicant or any official executing this certification on behalf of the applicant certifies that this application is prepared in conformity with the applicable requirements in the Code of PNRI Regulations and that all information contained herein are true and correct to the best of his knowledge and belief.

_____
Signature of Certifying Official
Over Printed Name

_____
Title/Position of Certifying Official

_____
Date

14. ACKNOWLEDGEMENT.

{Republic of the Philippines}
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Before me, a Notary Public for and in the above jurisdiction, personally appeared the following persons:

_____ CTC No. _____ Date/Place Issued _____

_____ CTC No. _____ Date/Place Issued _____

both known to me to be the same persons who executed the foregoing application and all attachments, and acknowledged to me the same to be their free and voluntary act and deed.

_____

Notary Public

Doc. No. ____
Page No. ____
Book No. ____
Series of ____

ATTACHMENT A

TRAINING AND EXPERIENCE OF PROPOSED AUTHORIZED USER

NAME : _____

NAME OF INSTITUTION: _____

EDUCATIONAL DEGREE: _____

1" x 1"
ID PHOTO

1. TRAINING RECEIVED IN BASIC RADIATION SAFETY

(Enclose certificates of training and use additional sheets if necessary.)

Field of Training	Location of Training	Date of Training	Duration of Training (Hours)		
			Lecture	Laboratory	On -the-Job
Radiation Physics & Instrumentation					
Radiation Protection					
Mathematics & Calculations Pertaining to the Use & Measurement of Radioactivity					
Radiation Biology					
Nuclear Regulations & Licensing					

2. WORK /CLINICAL EXPERIENCE IN THE USE OF BRACHYTHERAPY SOURCE

Radioactive Source (Element & Mass No.)	Maximum Activity (Becquerels)	Where Experience was Gained	Duration of Experience (Months)	Type of Use

3. RELEVANT TRAININGS (Submit certificates of relevant trainings.)

Title of Training	Place of Training	Date of Training

4. CERTIFICATION (Indicate the name of the Body that certified you to practice therapeutic radiology or similar disciplines and submit a copy of the certification).

Certifying Body	Date of Certification

I CERTIFY THAT THE INFORMATION GIVEN ABOVE IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE.

_____
Signature of Proposed Authorized User

_____
Date

Endorsed by: _____
Chairman, Radiation Safety Committee
Date: _____

ATTACHMENT B

TRAINING AND EXPERIENCE OF PROPOSED MEDICAL PHYSICIST

NAME : _____
NAME OF INSTITUTION: _____
EDUCATIONAL DEGREE: _____

1" x 1"
ID PHOTO

1. TRAINING RECEIVED IN BASIC RADIATION SAFETY

(Enclose certificates of training and use additional sheets if necessary.)

Field of Training	Location of Training	Date of Training	Duration of Training (Hours)		
			Lecture	Laboratory	On-the-Job
Radiation Physics and Instrumentation					
Radiation Dosimetry					
Radiation Protection					
Radiation Biology					
Radiation Therapy					

2. EXPERIENCE WITH RADIATION AND RADIOACTIVE MATERIAL

Radioactive Source (Element & Mass No.)	Maximum Activity (Becquerels)	Where Experience was Gained	Duration of Experience (Months)	Type of Use of Radioactive Source

3. EXPERIENCE WITH A BRACHYTHERAPY UNIT

Equipment (Brand Name, Model/Serial Numbers)	Radioactive Source (Element & Mass No.)	Activity of the Source (Becquerels)	Experience Gained	Place where Experience was Gained	Duration of Experience (Months)

4. RELEVANT TRAININGS (Submit certificates of relevant trainings.)

Title of Training	Place of Training	Date of Training

I CERTIFY THAT THE INFORMATION GIVEN ABOVE IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE.

_____
Signature of Proposed Medical Physicist

_____
Date

Endorsed by: _____
Chairman, Radiation Safety Committee

Date: _____

ATTACHMENT C

TRAINING AND EXPERIENCE OF PROPOSED RADIATION SAFETY OFFICER

NAME : _____
NAME OF INSTITUTION: _____
EDUCATIONAL DEGREE: _____

1" x 1"
ID PHOTO

1. TRAINING IN BASIC RADIOISOTOPE HANDLING TECHNIQUES

(Enclose certificates of training and use additional sheets if necessary.)

Field of Training	Location of Training	Date of Training	Duration of Training (Hours)		
			Lecture	Laboratory	On-the-Job
a. Radiation Physics and Instrumentation					
b. Radiation Protection					
c. Mathematics Pertaining to the Use and Measurement of Radioactivity					
d. Radiation Biology					
e. Nuclear Regulations f. and Licensing					

2. EXPERIENCE WITH RADIATION AND RADIOACTIVE MATERIAL

Isotope	Maximum Amount	Where Experience Was Gained	Duration of Experience	Type of Use

3. EXPERIENCE WITH RADIOTHERAPY EQUIPMENT, SURVEY INSTRUMENTS AND MONITORING DEVICES

Equipment (Brand Name, Model/Serial Numbers)	**Radioactive Source** (Element & Mass No.)	**Activity of the Source** (Becquerels)	**Where Experience was Gained**	**Duration of Experience**

4. RELEVANT TRAININGS (Submit certificates of relevant trainings.)

Title of Training	Place of Training	Date of Training

I CERTIFY THAT THE INFORMATION GIVEN ABOVE IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE.

_____
Signature of Proposed RSO

_____
Date

Endorsed by: _____
Chairman, Radiation Safety Committee

Date: _____

ATTACHMENT D

TRAINING AND EXPERIENCE OF PROPOSED RADIOTHERAPY TECHNOLOGIST

NAME : _____
NAME OF INSTITUTION: _____
EDUCATIONAL DEGREE: _____

1" x 1"
ID PHOTO

1. TRAINING RECEIVED IN BASIC RADIATION SAFETY

(Enclose certificates of training and use additional sheets if necessary.)

Field of Training	Location of Training	Date of Training	Duration of Training (Hours)		
			Lecture	Laboratory	On-the-Job
Radiation Physics & Instrumentation					
Radiation Safety & Protection					
Radiation Detection & Measurement					
Radiation Biology					

2. EXPERIENCE IN THE OPERATION OF A BRACHYTHERAPY UNIT

Equipment (Brand Name, Model/Serial Numbers)	Radioactive Source (Element & Mass No.)	Activity of the Source (Becquerels)	Where Experience was Gained	Duration of Experience (Months)

3. RELEVANT TRAININGS (Submit certificates of relevant trainings.)

Title of Training	Place of Training	Date of Training

I CERTIFY THAT THE INFORMATION GIVEN ABOVE IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE.

_____
Signature of Radiotherapy Technologist

_____
Date

Endorsed by: _____
Chairman, Radiation Safety Committee

Date: _____