Republic of the Philippines Department of Science and Technology

# PHILIPPINE NUCLEAR RESEARCH INSTITUTE

Commonwealth Avenue, Diliman, Quezon City

# APPLICATION FOR A RADIOACTIVE MATERIAL LICENSE (TELETHERAPY)

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **INSTRUCTIONS:** To complete this application, refer to Part 12 of the Code of PNRI Regulations and the corresponding Regulatory Guide for the Preparation of Application for the Medical Use of Sealed Radioactive Sources in Teletherapy. 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)   |  |  |  | | --- | --- | --- | |  | 1. NEW LICENSE |  | |  | 1. AMENDMENT TO LICENSE NUMBER | **Enter text.** | |  | 1. RENEWAL OF LICENSE NUMBER | **Enter text.** | |

1. **NAME AND MAILING ADDRESS OF APPLICANT.**

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

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Institution/Hospital: | | | | Enter text. | | |
| Address: | Enter text. | | | | | |
| Head of the Company: | | | | | Enter text. | |
| Telephone/Mobile Phone Number: | | | | | | Enter text. |
| Fax Number: | | Enter text. | | | | |
| E-Mail Address: | | | Enter text. | | | |

1. **PERSON TO BE CONTACTED ABOUT THE APPLICATION.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Full Name: | Enter text. | | | |
| Position/Title: | | Enter text. | | |
| Address: | Enter text. | | | |
| Telephone/Mobile Phone Number: | | | | Enter text. |
| Fax Number: | Enter text. | | | |
| E-Mail Address: | | | Enter text. | |

# 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** |
| Enter text | Enter text | Enter text | Enter text | Enter text | Enter text | Enter text | Enter text |
| Enter text | Enter text | Enter text | Enter text | Enter text | Enter text | Enter text | Enter text |
| Enter text | Enter text | Enter text | Enter text | Enter text | Enter text | Enter text | Enter text |

1. **LOCATIONS OF USE**. (Attach location map or building plan.)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Address: | Enter text. | | | |
| Telephone/Mobile Phone Number: | | | | Enter text. |
| Fax Number: | | Enter text. | | |
| E-Mail Address: | | | Enter text. | |

# 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) | Enter text | Enter text | Enter text |
| Medical Physicist | Enter text | Enter text | Enter text |
| Radiation Protection Officer  (RPO) | Enter text | Enter text | Enter text |
| Assistant RPO | Enter text | Enter text | Enter text |
| Radiotherapy Technologists | Enter text | Enter text | Enter text |

# REPRESENTATION IN THE RADIATION SAFETY COMMITTEE (RSC).

Identify the members of the RSC, indicating their position/title, department in the hospital, and telephone/mobile number.

1. **FACILITIES.** (Use separate sheets.)

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, safety interlock systems, warning systems, and adjacent areas.

# EQUIPMENT/INSTRUMENTS/DEVICES.

* 1. **Equipment.** Describe the equipment features, including the alarms and electrical interlocks; Submit certificate of conformance of all performance specifications and tests with standards of the IEC; Submit proof of accreditation of the company and the qualification of the individuals who will install the teletherapy unit.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Equipment** | **Manufacturer** | **Date of Manufacturer** | **Model/ Serial Number** | **Date of Purchase** | **Power Output** | **Institution to Perform Service & Maintenance** |
| Enter text | Enter text | Enter text | Enter text | Enter text | Enter text | Enter text |
| Enter text | Enter text | Enter text | Enter text | Enter text | Enter text | Enter text |

# Radiation Detection/Measurement Survey Instruments

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Type of Instrument** (GM,  Scintillation, IC,  etc.) | **Model No.**  **/Serial No.** | **Manufacturer** | **Radiation Detected** (,,, etc.) | **Sensitivity Range (mSv/h)** | **Window Thickness (mm)** | **Intended Use** | **Date of Initial Use** |
| Enter text | Enter text | Enter text | Enter text | Enter text | Enter text | Enter text | Enter text |
| Enter text | Enter text | Enter text | Enter text | Enter text | Enter text | Enter text | Enter text |

* 1. **Personnel Monitoring Devices**

|  |  |  |  |
| --- | --- | --- | --- |
| **Monitoring Device** | **No. of Units** | **Name and Address of Supplier(s)** | **Date of Last Calibration** |
| Film Badge | Enter text. | Enter text. | Enter text. |
| TLD | Enter text. | Enter text. | Enter text. |
| Pocket Dosimeter | Enter text. | Enter text. | Enter text. |
| Alarm Ratemeters | Enter text. | Enter text. | Enter text. |
| Others | Enter text. | Enter text. | Enter text. |

1. **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 |  | Enter text. |
| 9.2 RSC Duties & Responsibilities |  | Enter text. |
| 9.3 RPO Authorities, Duties and Responsibilities |  | Enter text. |
| 9.4 Training Program |  | Enter text. |
| 9.5 Personnel Monitoring Program |  | Enter text. |
| 9.6 Calibration |  | Enter text. |
| 1. Calibration of Survey Instruments |  | Enter text. |
| 1. Calibration of Teletherapy Unit/Sources |  | Enter text. |
| 9.7 Leak Test Program |  | Enter text. |
| 9.8 Radiation Surveys |  | Enter text. |
| 9.9 Operating Procedures |  | Enter text. |
| 9.10 Safety and Security of Radioactive Sources |  | Enter text. |
| 9.11 Emergency Procedures |  | Enter text. |
| 9.12 Decommissioning Plan |  | Enter text. |

1. **SECURITY OF SEALED SOURCES.** Submit a Security Plan in accordance with CPR Part 26.

# MANAGEMENT OF DISUSED RADIOACTIVE 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 copy of agreement with original supplier or manufacturer.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **APPLICATION FEE:** | | Enter text. | Official Receipt No.: | | | Enter text. | |
|  | |  | Date: | Enter text. | | | |
| **LICENSE FEE:** | Enter text. | | Official Receipt No.: | | | Enter text. | |
|  | |  | Date: | | Enter text. | |

# 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 |
|  |
| Enter text. |
| Title/Position |
|  |
| Enter text. |
| Date |

# ACKNOWLEDGEMENT.

{Republic of the Philippines}

{ }

Before me, a Notary Public for and in the above jurisdiction, personally appeared the following persons:

Name CTC No. Date/Place Issued

Name 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**: | Enter text. | | |  |  |
| **NAME OF COMPANY**: | | Enter text. | |  |
| **EDUCATIONAL DEGREE:** | | | Enter text. |  |
|  | | |  |  |
|  | | |  |  |
|  | | |  |  |

1. **TRAINING IN 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** |
| a. Radiation Physics and Instrumentation | Enter text. | Enter text. | Enter text. | Enter text. | Enter text. |
| b. Radiation Safety | Enter text. | Enter text. | Enter text. | Enter text. | Enter text. |
| c. Mathematics  Pertaining to the Use and Measurement of Radioactivity | Enter text. | Enter text. | Enter text. | Enter text. | Enter text. |
| d. Security of  Radioactive  Sources | Enter text. | Enter text. | Enter text. | Enter text. | Enter text. |
| e. Nuclear Regulations and Licensing | Enter text. | Enter text. | Enter text. | Enter text. | Enter text. |

1. **WORK /CLINICAL EXPERIENCE IN THE USE OF RADIOACTIVE SOURCE IN A TELETHERAPY/GAMMA STEREOTACTIC RADIOSURGERY UNIT**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Radioactive Source/**  **Radiographic**  **Equipment/**  **Instruments/Devices** | **Maximum Amount of Radioactive**  **Source Handled** | **Where**  **Experience**  **Was Gained** | **Duration of Experience** | **Type of Use** |
| Enter text. | Enter text. | Enter text. | Enter text. | Enter text. |
| Enter text. | Enter text. | Enter text. | Enter text. | Enter text. |

1. **RELEVANT TRAININGS**

**(**Submit certificates of relevant trainings.)

|  |  |  |
| --- | --- | --- |
| **Title of Training** | **Place of Training** | **Date of Training** |
| Enter text. | Enter text. | Enter text. |
| Enter text. | Enter text. | Enter text. |

1. **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** |
| Enter text. | Enter text. |
| Enter text. | Enter text. |

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

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | | **Signature of Proposed Authorized User** | | | | |
|  | | | | |  | | | |
| Date: | | | | | | | Enter text. |
| Endorsed by: | |  | | | |
|  | | **Chairman, Radiation Safety Committee** | | | |
|  |  | | | | |
| Date: | Enter text. | |

# ATTACHMENT B

**TRAINING AND EXPERIENCE OF PROPOSED MEDICAL PHYSICIST**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **NAME**: | Enter text. | | |  |  |
| **NAME OF COMPANY**: | | Enter text. | |  |
| **EDUCATIONAL DEGREE:** | | | Enter text. |  |
|  | | |  |  |
|  | | |  |  |
|  | | |  |  |

# 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 | Enter text. | Enter text. | Enter text. | Enter text. | Enter text. |
| Radiation Dosimetry | Enter text. | Enter text. | Enter text. | Enter text. | Enter text. |
| Radiation Protection | Enter text. | Enter text. | Enter text. | Enter text. | Enter text. |
| Radiation Biology | Enter text. | Enter text. | Enter text. | Enter text. | Enter text. |
| Radiation Therapy | Enter text. | Enter text. | Enter text. | Enter text. | Enter text. |

# 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** |
| Enter text. | Enter text. | Enter text. | Enter text. | Enter text. |
| Enter text. | Enter text. | Enter text. | Enter text. | Enter text. |

1. **EXPERIENCE WITH A TELETHERAPY/GAMMA STEREOTACTIC RADIOSURGERY UNIT**

(e.g., full calibration measurements, output spot checks, etc.)

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

1. **RELEVANT TRAININGS** (Submit certificates of relevant trainings.)

|  |  |  |
| --- | --- | --- |
| **Title of Training** | **Place of Training** | **Date of Training** |
| Enter text. | Enter text. | Enter text. |
| Enter text. | Enter text. | Enter text. |
| Enter text. | Enter text. | Enter text. |

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

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | | **Signature of Proposed Medical Physicist** | | | | |
|  | | | | |  | | | |
| Date: | | | | | | | Enter text. |
| Endorsed by: | |  | | | |
|  | | **Chairman, Radiation Safety Committee** | | | |
|  |  | | | | |
| Date: | Enter text. | |

# ATTACHMENT C

**TRAINING AND EXPERIENCE OF PROPOSED RADIATION PROTECTION OFFICER**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **NAME**: | Enter text. | | |  | Shape  Description automatically generated with low confidence |
| **NAME OF COMPANY**: | | Enter text. | |  |
| **EDUCATIONAL DEGREE:** | | | Enter text. |  |
|  | | |  |  |
|  | | |  |  |
|  | | |  |  |

# 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 | Enter text. | Enter text. | Enter text. | Enter text. | Enter text. |
| b. Radiation Protection | Enter text. | Enter text. | Enter text. | Enter text. | Enter text. |
| c. Mathematics Pertaining to the Use of Radioactive Materials and Measurement of Radioactivity | Enter text. | Enter text. | Enter text. | Enter text. | Enter text. |
| d. Radiation Biology | Enter text. | Enter text. | Enter text. | Enter text. | Enter text. |
| e. Nuclear Regulations and Licensing | Enter text. | Enter text. | Enter text. | Enter text. | Enter text. |

# EXPERIENCE WITH RADIATION AND RADIOACTIVE MATERIAL

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Isotope** | **Maximum Amount** | **Where Experience Was Gained** | **Duration of Experience** | **Type of Use** |
| Enter text. | Enter text. | Enter text. | Enter text. | Enter text. |
| Enter text. | Enter text. | Enter text. | Enter text. | Enter text. |
| Enter text. | Enter text. | Enter text. | Enter text. | Enter text. |

1. **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** |
| Enter text. | Enter text. | Enter text. | Enter text. | Enter text. |
| Enter text. | Enter text. | Enter text. | Enter text. | Enter text. |

1. **RELEVANT TRAININGS** (Submit certificates of relevant trainings.)

|  |  |  |
| --- | --- | --- |
| **Title of Training** | **Place of Training** | **Date of Training** |
| Enter text. | Enter text. | Enter text. |
| Enter text. | Enter text. | Enter text. |

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

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | | **Signature of Proposed RPO/ARPO** | | | | |
|  | | | | |  | | | |
| Date: | | | | | | | Enter text. |
| Endorsed by: | |  | | | |
|  | | **Chairman, Radiation Safety Committee** | | | |
|  |  | | | | |
| Date: | Enter text. | |

# ATTACHMENT D

**TRAINING AND EXPERIENCE OF PROPOSED RADIOTHERAPY TECHNOLOGIST**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **NAME**: | Enter text. | | |  | Shape  Description automatically generated with low confidence |
| **NAME OF COMPANY**: | | Enter text. | |  |
| **EDUCATIONAL DEGREE:** | | | Enter text. |  |
|  | | |  |  |
|  | | |  |  |
|  | | |  |  |

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 | Enter text. | Enter text. | Enter text. | Enter text. | Enter text. |
| Radiation Protection | Enter text. | Enter text. | Enter text. | Enter text. | Enter text. |
| Radiation Detection & Measurement | Enter text. | Enter text. | Enter text. | Enter text. | Enter text. |
| Radiation Biology | Enter text. | Enter text. | Enter text. | Enter text. | Enter text. |

# EXPERIENCE IN THE OPERATION OF A TELETHERAPY/GAMMA STEREOTACTIC RADIOSURGERY 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) |
| Enter text. | Enter text. | Enter text. | Enter text. | Enter text. |
| Enter text. | Enter text. | Enter text. | Enter text. | Enter text. |

1. **RELEVANT TRAININGS (**Submit certificates of relevant trainings.)

|  |  |  |
| --- | --- | --- |
| **Title of Training** | **Place of Training** | **Date of Training** |
| Enter text. | Enter text. | Enter text. |
| Enter text. | Enter text. | Enter text. |
| Enter text. | Enter text. | Enter text. |

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

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | **Signature of Proposed Radiotherapy Technologist** | | | | |
|  | | | |  | | | |
| Date: | | | | | | Enter text. |
| Endorsed by: | |  | | |
|  | | **Chairman, Radiation Safety Committee** | | |
|  |  | | | |
| Date: | Enter text. | |