**Appendix 2
Application for a Permit for the Use of Radioactive Material**

**Section 1 Identification**

|  |
| --- |
| **Principal Investigator** |
| Name: |  |
| Faculty/ Department: |  |
| Office Phone: |  |
| After Hours Phone: |  |
| Email: |  |
| Office Room Number: |  |

|  |
| --- |
| **Authorized User List** |
| Please list all your current laboratory staff, students and volunteers. |
|  |  |
| **Name** |  | **Faculty, Staff, Student, or Volunteer** |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

**Section 2 Program Intent**

Please include a brief summary of your research program intent:

**Section 3 Sources Required and Location**

List open source radioactive materials which be required:

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Radio-isotope** | **Max. vial size required****(MBq)** | **Possession limit required (MBq)** | **Exemption Quantity****(MBq)** | **Annual Limit of Intake****(MBq)** | **Type of Radioactive Emission** | **Energy of Radioactive Emission** | **Half Life** | **Critical Organ** |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |

Has the laboratory been commissioned for radioactivity use? What Laboratory Level is the lab?

List sealed sources which will be required. If source is to be used for calibration of a device or is to be incorporated into a device, provide make, model and serial number of device.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Radioisotope** | **Activity** | **Exemption Quantity** | **Type of Radioactive Emission** | **Energy of Radioactive Emission** | **Half Life** | **Make, Model, S/N of Device (if applicable)** |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

List any sealed sources/sealed sources in devices that need to be leaked tested? What is the frequency?

Please indicate where the project activities will be located; please include storage (e.g. fridge, freezer, cabinet, and vault locations), shared equipment rooms (e.g. teaching labs, etc.), and if appropriate how security will be maintained:

|  |  |  |  |
| --- | --- | --- | --- |
| **Building** | **Room** | **Room Use (e.g. storage, manipulations, waste disposal, etc.)** | **Security Considerations** |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

*\* Please attach additional pages if necessary*

**Section 4 Security**

Indicate below if additional mitigation strategies are required to manage security of your materials:

|  |  |
| --- | --- |
| **Security Risk** | **Mitigation Strategies Required** |
| Physical Security |  |
| Personnel Suitability and Reliability |  |
| Material Accountability |  |
| Incident and Emergency Response |  |
| Information Security |  |

*\* Please attach additional pages if necessary*

**Section 5a Hazard Identification**

Describe proposed use of radioactive materials, include dose calculations where they can be evaluated. Identify any hazards present and how you plan to mitigate them. This includes any hazards in addition to radioisotopes (e.g., physical, electrical, chemical, etc.). Attach extra pages as required. Please attach appropriate equipment SOPs to this application. Please include operation, training requirements, preventative maintenance, etc.

Include make, model and serial numbers of radiation detection equipment which will be used in the course of this research (i.e., survey meters, contamination monitors, wipe tests, etc.).

How will equipment be maintained? Attach applicable SOPs.

**Section 5b Emergency Response**

Please identify what incidents and emergencies have the potential to occur (e.g., theft, spills, exposure, loss, etc.) Attach applicable emergency response SOPs .

**Section 6 Dosimetry**

Will dosimetry be required? What specific types of dosimeters (personal, area, TLDs, neutron) are required?

**Section 7 Waste Disposal**

What type of radioactive waste will you create (e.g., liquid, solid, radioisotope + chemicals, etc.)? What frequency of disposal will you require? Will waste be stored for decay or require third-party Disposal Company?

As the Principal Investigator on this project, I declare that I am familiar with the contents of the University of Regina Radiation Safety Program, and that the above describes my research with regards to the use of radioactive materials, in its entirety.

As the legally responsible individual I will ensure that all research and/ or teaching conducted under my direction in the above laboratories and by the personnel listed, conforms to the standards set out in the University of Regina Radiation Safety Program and all applicable Canadian Nuclear Safety Commission Acts and Regulations. Any major deviation from the project, as originally approved, will be submitted to the Radiation Safety Committee via the Radiation Safety Officer for approval prior to its implementation.

**Principal Investigator’s Signature**

Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Signature\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_

**Department Head of Program Chair’s Signature**

Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Signature\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Dean of Faculty’s Signature**

Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Signature\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Radiation Safety Committee Approval**

Approved □ Yes □ No

Radiation Safety Chair Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Radiation Safety Chair Signature\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date\_\_\_\_\_\_\_\_\_\_\_\_\_\_

RSO Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

RSO Signature\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_