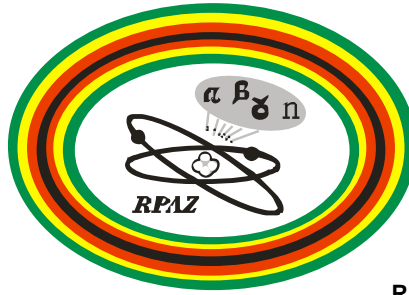


1 McCaw Drive
Avondale
Box A1710
Avondale, Harare
Zimbabwe Phone: +263 4 335 792, 304 982,
+263 4 335 627, 335683, 308 006
E-mail: officialmail@rpaz.co.zw



RPA-AUTH/FRM-04/NM/10

RADIATION PROTECTION AUTHORITY OF ZIMBABWE
RADIATION PROTECTION ACT [CHAPTER 15:15]

- INSTRUCTIONS: (i) Provide ALL the requested information
(ii) Information in item numbers 2 to 4 should be provided for each equipment/facility.
(iii) Tick appropriate box
(iv) Use separate sheet where necessary

NOTE: The Authority may require additional information to fully consider this application prior to issuing a license

**APPLICATION FOR AUTHORISATION TO USE UNSEALED RADIOACTIVE SOURCES
IN MEDICINE**

1. GENERAL INFORMATION

(a) Name of Applicant/Institution:

Address:

Telephone No

Fax No.

E-mail

(b) Type of license Application: New Amendment renewal

(c) Purpose of application: Construction use/operation

(d) Name and Title of the Head of Institution:

(e) Person responsible for radiation safety:

Name:

Title:

Qualification:.....Certification:.....

Experience:.....

2. SOURCES

(a) Please give the details of the radionuclides involved in the work

| Radionuclide / Pharmaceutical | Maximum activity at one time (Bq) | Physical / chemical form | Use /Application |
|--|--|--------------------------------------|---------------------------------------|
| <i>(e.g. Tc – 99m generator)</i> | <i>(e.g. 37 GBq)</i> | <i>(e.g. Sodium perchnetate)</i> | <i>(e.g. Diagnostic imaging)</i> |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

(b) Containment of the radionuclides:

Describe how the radionuclides(s) will initially be contained. Indicate whether there will be any special features e.g. pressurized container or shielding.

(c) Work pattern:

State the frequency of consignments of radionuclides and over what period of time the work will proceed.

(d) Work Locations:

Will the sources be stored for long periods of time at any address other than given in Item 1(a) above?

Yes

No

If yes please give details of the storage addresses:

| | | |
|--|--|--|
| | | |
|--|--|--|

(e) Radioactive Wastes

Indicate whether the work covered by this application is likely to generate radioactive waste(s) and provide an assessment of the different forms:

| Radionuclide | Waste Form | Maximum Activity | Proposed Disposal Route |
|--------------------------------|-------------------|-------------------------|--------------------------------|
| e.g. Iodine -125 Technetium | Liquid | 10KBq | To Drain |
| | Used Syringes | 2MBq | Decay In Storage |
| | | | |
| | | | |
| | | | |
| | | | |

- i. Give details on how foot operated dustbins with plastic liners inside are used to store the types of wastes indicated in table

- ii. Give details of how radiation wastes with activity below clearance levels (e.g. boxes, gloves, liquid etc) will be disposed

- iii. Describe procedures for monitoring and managing the generated wastes from patients who have been administered with radioactive materials in case of urination, vomiting etc

3. LOCATION OF THE FACILITY

(a) Provide the details of the location of equipment / sources

| | |
|--|--|
| Physical Address.(include room number) | |
| City / Town | |
| Province | |

(b) Layout of the Laboratory

Attach a sketch of the laboratory layout and describe laboratory facilities and factors such as:

- i. Physical separation of the laboratory from personal offices, meeting space and eating areas
- ii. Laboratory ventilation in order to allow air circulation
- iii. Fume hood available in case of experiments involving the use of volatile radioactive sources (e.g. radio iodine and sulphur-35 labeled amino acid compounds to avoid airborne radioactivity)
- iv. Working area for wet chemistry experiments or admission of radioisotopes to patients (in case of nuclear medicine)
- v. Laboratory emergency exit doors or windows with shutters, which open outwards
- vi. Describe any arrangement or facilities made for working with radioactive sources in field (if applicable):
- vii. Describe how arrangement is made to separate corrosive and flammable materials from radioactive stock solutions in store:

- viii. Detail the availability of chemical resistant and readily cleaned bench surface used on bench tops (e.g. chemical grade formica):

- ix. Detail the availability of laboratory washing sinks installed and labeled for radioactive materials:

- x. Describe the laboratory absorbent materials available to cover laboratory bench tops which can be changed periodically when contaminated:

- xi. Describe the type of spill trays available to contain material in the event of spill:

(c) **Radioactive Source Stocking**

Give details of the arrangements put in place to ensure that radioactive material stock solution(s) will be kept secure both during use and storage including:

- i. Materials used to construct shelving/cabinets for chemical storage (e.g. hardwood or metal etc):
- ii. Physical barriers provided for safe storage of radioactive materials (e.g. locked doors/ refrigerator /drawers/boxes):
- iii. Log books for recording receipts, usage, discharge or disposal of radioactive materials:
- iv. Name of person responsible for constant surveillance of all radioactive stock materials in store and the access control to radioactive materials by unauthorized individuals:

4. SAFETY ASSESSMENTS

- (a) Give details of the protective gears available for working with unsealed radioactive materials (e.g. laboratory coats, disposable gloves, shoe cover, safety glasses, pipettes automatic/manual):

- (b) Describe the type and model of survey meters or contamination monitors available

5. EMERGENCY PROCEDURES

Provide details of your emergency procedures to address emergencies such as substantial accidental exposure of an individual or any other emergencies envisaged

6. SIGNATURE AND CERTIFICATION

I _____ certify that all information provided therein, including any attachments are true and correct to the best of my knowledge and belief ^{*}.

Signature of authorized representative of the legal person

Title:

Date..

FOR OFFICIAL USE ONLY

- (i) Date of receipt
- (ii) Date of evaluation
- (iii) Decision:Granted/Denied
- (iv) License/RegistrationNo.
- (v) Evaluatedby
- (vi) General remarks and/or Comments

Signature.....

^{*} *It is an offence in terms of the Radiation Protection Act [Ch 15:15] Section 20 (1)(d) and (e) to withhold any information to the ownership or management of a radiation source or give information which he knows to be untrue or has no reason to believe to be true.*