

UNITED REPUBLIC OF TANZANIA

**Tanzania Atomic Energy Commission
P.O. Box 743
ARUSHA**

Form TAEC - 4

**ATOMIC ENERGY ACT (No. 7 of 2003)
(PART III, SECTION 17 & 18)**

**APPLICATION FOR AUTHORIZATION TO POSSESS AND USE UNSEALED RADIOACTIVE
MATERIALS IN NUCLEAR MEDICINE, ANALYTICAL AND RESEARCH LABORATORIES**

1. Type of authorization and classification of the organization

- (a) New / Renewal.....
(b) Government/Non Government.....

2. Name and address of Applicant

- (a) Name of organization.....
(b) Address
(c) Telephone/Facsimile.....
(d) E-mail.....
(e) Name and title of Head of Applying organization:.....

3 (a) Name of Radiation Safety Officer.....

- (b) Title.....
(c) Telephone.....

4. Give name(s) and qualification of available qualified experts who will use the source (s)

	Name (s)	Qualification	Last training received relevant to the field and year of training
(a)			
(b)			
(c)			
(d)			
(e)			

(Use separate sheet where necessary)

5. State the practice for which the radioactive materials will be used for (i.e. nuclear medicine, analytical or research laboratories).....
.....

6. Give details of radioactive materials available

	Radionuclide(s)	Maximum activity (Bq)	Physical/chemical form	Use / Application
e.g	Tc 99 ^m generator	37 GBq	Sodium pertechnetate	Diagnostic imaging
(a)				
(b)				
(c)				
(d)				
(e)				

7. Attach a sketch of the laboratory layout and describe laboratory facilities and factors such as:
- (a) Physical separation of the laboratory from personal offices, meeting space and eating areas
.....
 - (b) Laboratory ventilation in order to allow air circulation.....
.....
 - (c) Fume hood available in case of experiments involving the use of volatile radioactive sources (e.g. radio iodine, and sulphur-35 labelled amino acid compounds to avoid airborne radioactivity
.....
 - (d) Working area for wet chemistry experiments or admission of radioisotopes to patients (in case of nuclear medicine).....
.....
 - (e) Laboratory emergency exit doors or windows with shutters, which open outwards.....
.....
.....
8. Describe any arrangement or facilities made for working with radioactive sources in field (if applicable)
.....
.....
9. Describe procedures for monitoring and managing the generated wastes from patients who have been administered with radioactive materials in case of urination, vomiting etc.....
.....
10. Give details of the preparation made for which the radioactive material stock solution(s) will be kept secure both during use and storage including:-
- (a) Materials used to construct shelving/cabinets for chemical storage (e.g. hardwood or metal etc)
.....
 - (b) Physical barriers provided in store for safe storage of radioactive materials (e.g. locked doors/refrigerator/drawers/boxes).....
 - (c) Log books for recording receipts, usage, discharge or disposal of radioactive materials.....
.....
 - (d) Name of person responsible for constant surveillance of all radioactive stock materials in store and the control access to radioactive materials with unauthorized individuals.....
.....
11. Describe how arrangement is made to separate corrosive and flammable materials from radioactive stock solutions in store.....
.....
.....
12. Explain the availability of chemical resistant and readily cleaned bench surface used on bench tops (e.g. chemical grade formica
.....
13. Explain the availability of laboratory of washing sinks installed and labelled for radioactive materials:.....
.....
14. Describe the laboratory absorbent materials available to cover laboratory bench tops which can be changed periodically when contaminated.....
.....
15. Describe the type of spill trays available to contain material in the event of spill
.....
16. Mention the protective gears available for working with unsealed radioactive materials (e.g. laboratory coats, disposable gloves, shoe cover, safety glasses, pipettes (automatic/manual).....
.....

17. Describe the type and model of survey meters or contamination monitors available.....

18. In the table below indicate the types of possible waste (s) that will be generated after the intended application of radioisotope :

Radionuclide(s)	Waste type	Maximum activity	Proposed disposal route

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

20 Mention how radwastes with activity below clearance levels (e.g. boxes, gloves, liquid etc.) will be disposed (e.g. dumpsite, incinerator).....

21. Attach a written procedure for emergency plans in case of a radiological accident

22. Declaration: I.....hereby declare that the information provided above is true and correct; and that I have read and understood the Radioactive waste management for protection of Human health and environment regulations, 1999 which I am bound to comply with during my practice.

DateSignature of Applicant.....

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- (i) Date at which application form was received.....
- (ii) Date at which the Application was evaluated:
- (iii) Licence / Registration No.:
- (iv) General Remarks and/or Comments:

