SCHEDULE 1

Regulation 15

ATOMIC ENERGY COUNCIL,
P.O. Box 7044,
Kampala.

ATOMIC ENERGY
FORM 2A (AEF 2A)

THE REPUBLIC OF UGANDA

THE ATOMIC ENERGY ACT, No. 24 of 2008

FORM 2A

APPLICATION FOR AUTHORISATION TO POSSESS AND USE A SOURCE(S) FOR INDUSTRIAL APPLICATION

TYPE OF AUTHORIZATION

Please tick ☑

☐ New application

☐ Renewal of authorisation number: _____

GENERAL INFORMATION

1. Name and address of applicant:

Main address	*Mailing address (if different)*	*Address of use (if different)*

2. Radiation Safety Officer (RSO):
   (a) Name and address:_____
   _____
   (b) Qualification:_____
   (c) Experience:
   _____
   _____

(d) Telephone Number:_____

(e) E-mail: _____

3. Name and information about qualified experts:

Name	*Expertise*	*Qualification*	*Certification*	*Experience*	*Reg. No*	*E-mail*

4. Other classified workers that will be responsible for the equipment:

Name	*Title*	*Qualification*	*Certification*	*Experience*	*E-mail*

5. Proposed date of installation and/or commissioning of facilities and equipment:

_____

PART I—WELL LOGGING, PORTABLE GAUGING, DETECTION AND ANALYTICAL DEVICES.

6. Purpose of the Device or radioactive material will be used: (e.g. Well Logging, Portable Gauging, Detection and Analytical Devices Fixed/ Installed Gauging Detection and Other similar Devices)

_____

7. Describe details of the radiation devices and radioactive materials to be used for:

(a) Equipment with sealed sources incorporated

Description:	*Radionuclide*	*Maximum activity*	*Number*
Manufacturer:_____ Radiation type (alpha, beta, gamma, neutron): _____ Model no. device: _____ Source: _____ Serial no. device: _____ Source: _____			
Manufacturer: _____ Radiation type (alpha, beta, gamma, neutron): ____ Model no. device: _____ Source: _____ Serial no. device: _____ Source: _____			

(b) Neutron generators - accelerator

Manufacturer:	*Model number*	*Serial number*	*Neutron energy*	*Target nuclide*

PART II - INDUSTRIAL RADIOGRAPHY

8. Details of Equipment

(a) Sealed source radiographic devices

Manufacturer	*Model Number*	*Source model number*	*Radionuclide*	*Source supplier*	*Maximum activity*	*Number of devices*
(e.g. ABC Co.)	(e.g. Model A)	(e.g. Model B)	(e.g. ^{192} Ir)		(e.g. 2TBq)	(e.g. 8)

(b) X-ray generators

Manufacturer	*Model Number*	*Serial Number*	*Maximum Voltage (MeV)*	*Maximum current (mA)*

(c) accelerator

Manufacturer	*Model Number*	*Serial Number*	*Type of radiation*	*Maximum energy (MeV)*	*Maximum current (mA)*

PART III - AN IRRADIATION FACILITY

9. Type Sources and Irradiator:

☐ Electron

☐ Gamma

10. For gamma facility, state:

(a) Model/Type and identification number of irradiator

_____

(b) Name and address of:

ii. the manufacturer of the irradiator_____

iii. the supplier of the irradiator

_____

(c) Details of radioactive source

Radionuclide	*Number of Sources*				*Total activity (Bq)*		*Source Details*		*Storage (wet/dry)*
	Per pencil	*Per module*	*Per rack*	*Total*	*initial*	*At installation*	*Model No(s)*	*Description*	

11. For accelerator:

Name and address of Manufacturer	*Model Number*	*Type of radiation*	*Maximum energy (MeV)*	*Voltage*	*Maximum current (mA)*

PART IV - FACILITIES AND EQUIPMENT

12. Location of equipment/Sources:
Provide the details of the location of equipment/sources:

(i) Name of unit/department____ Building No.: ____Room No.:___ Floor: _____ (if applicable).
(ii) Plot No.: _____ Town/street/ward _____
(i) District: _____

13. Layout of the installation*

(a) Describe factors such as the layout of the facility and its safety systems including:

(i) Building materials, (ii) Alarm, (iii) Shielding, (iv)Engineering controls (e.g. interlocks, warning safety devices, emergency stop button, prevention of unauthorized personnel entering area, means of escape or communication from within enclosure etc.)

_____
_____
_____
_____
_____

14. Standards:
Indicate to which IEC and ISO standards does the equipment and sources used for medical exposure conform:
Equipment: _____
Are prototype test certificates available:

☐ Yes

☐ No ; if yes attach copies

Sources:

_____

Are source certificates available:

☐ Yes

☐ No; if yes attach original copies

15. Services and maintenance:

Identify who will be authorized to perform the service and maintenance of the equipment:

Name: _____Authorization reference No: _____

Organization: _____Address: _____

Telephone number: _____

16. Safety assessments:

(i) Taking into account of shielding, provide calculation of maximum dose rates in all adjacent areas outside the installation:

_____

_____

(ii) Provide estimates of the magnitude of the expected doses to persons during normal operations:

_____

_____

(iii) Identify the probability and magnitude of potential exposures arising from accidents or incidents:

_____

_____

**(Attach a layout drawing of the installation showing adjacent surroundings with controlled and supervised areas clearly identified).*

17. Safety system:

(i) Describe the overall safety system which will be used to ensure the safe operation of the irradiator (e.g. design features, defense in depth, layout). Further describe, in detail, the safety systems for preventing access to the irradiation room whilst the source is exposed and for warning of unsafe conditions (e.g. interlocks, installed monitors).

_____

_____

(ii) Attach the manufacturer's specifications of that system .

18. Personal protective equipment:
Describe any personal protective equipment that will be provided.

_____
_____
_____

PART V - RADIATION PROTECTION AND SAFETY PROGRAMME

19. Organisational structure:

Describe your organisational and management control systems, including assignment of responsibilities and clear lines of authority related to radiation safety.

(i) staffing levels _____
(ii) equipment selection, _____
(iii) other assignments of the radiation protection officer,

_____
_____
_____

(iv) authority of the radiation protection officer to stop unsafe operations,

_____

(v) personel training,

_____
_____

(vi) maintenance of records,

_____
_____

(vii) how problems affecting safety are identified and corrected.

_____

(viii) Other relevant information

_____
_____

20. Security and safety of radiation sources:
Describe measures to be undertaken to ensure the security and safety of radiation sources during:
Use:

_____
_____
_____

transport:

_____
_____
_____

storage:

_____
_____
_____

21. Radioactive waste management:
How will the generated radioactive wastes be managed?

(a) Source(s) returned to the supplier:

☐ Yes

☐ No; If yes attach a copy of the agreement; if no

(b) How will it be managed in the country?

_____
_____
_____

22. Emergency procedures:
Is an emergency plan available?

☐ Yes

☐ No; If yes, attach the summary of the plan and related information e.g. organization , implementation etc.

23. Occupational and public exposures control:

Describe your program for monitoring your work place (e.g. dose rate measurements, leak tests for Gamma facility),

_____
_____
_____
_____

PART VI - DECLARATION

I, _____ (name) Certify that all the information given herein is true and correct to the best of my knowledge.

Date: _____ *Signature of applicant:* _____

FOR OFFICIAL USE ONLY			
Notification No:			
	By	Date	Signature
Received:			
Evaluated:			
General Remarks and/or Comments:			