Virginia Department of Health
Radioactive Materials Program
(804) 864-8150

APPLICATION FOR A NEW RADIOACTIVE MATERIAL LICENSE FOR ACADEMIC, RESEARCH AND DEVELOPMENT AND OTHER LICENSES OF LIMITED SCOPE

The Virginia Department of Health (VDH) is requesting disclosure of information for obtaining a radioactive material license. Failure to provide any information may result in denial or delay of a radioactive material license.

Instructions – Complete all items. Refer to VAREG 'Guidance for Academic, Research and Development and other Licenses of Limited Scope'. Use supplementary sheets where necessary. Retain one copy and submit original of the entire application to the Virginia Department of Health, Radioactive Materials Program, 109 Governor Street, Room 730, Richmond, VA 23219.

APPLICATION TYPE

Item 1 Type Of Application (Check box)

☐ New License

CONTACT INFORMATION

Item 2 Name And Mailing Address Of Applicant:	**Item 3 Person To Contact Regarding Application:**
, -	Name: E-mail:
Applicant's Telephone Number (Include area code): ( ) - x	Telephone Number (Include area code) ( ) - x

LOCATION OF RADIOACTIVE MATERIAL

Item 4 Address(es) Where Radioactive Material Will Be Used Or Possessed (Do not use Post Office Box)

Address	Telephone Number (Include area code)
, -	( ) - x
Address	Telephone Number (Include area code)
, -	( ) - x
Address	Telephone Number (Include area code)
, -	( ) - x

Is radioactive material used at temporary job sites and/or other locations for field studies or other off-site locations? ☐ Yes ☐ No

If yes, please attach an additional sheet(s) with the locations (addresses) and a list of activities to be conducted at each location.

RADIATION SAFETY OFFICER

Item 5. Radiation Safety Officer (Check all that apply)

☐ The name of the proposed RSO who will be responsible for ensuring that the licensee's radiation safety program is implemented in accordance with approved procedures.

RSO Name:

Tel (Include area code): ( ) - x

E-mail:

AND

☐ Before obtaining radioactive materials, the proposed RSO will have successfully completed one of the training courses described in the section titled "Individual(s) Responsible for Radiation Safety Program and Their Training and Experience" in VAREG 'Guidance for Academic, Research and Development, and other Licenses of Limited Scope'.

OR

☐ Alternative information demonstrating that the proposed RSO is qualified by training or experience (information is attached).

AND EITHER

☐ The above named individual will perform all duties and responsibilities as listed in Appendix I in VAREG 'Guidance for Academic, Research and Development, and other Licenses of Limited Scope' and ensure proper oversight of the radiation safety program, including but not limited to, performing periodic on-site evaluations.

OR

☐ Alternative information is attached demonstrating how the listed individual will perform the duties and responsibilities and detailing how oversight of the radiation safety program will be conducted, including but not limited to, performing periodic on-site evaluations.

AUTHORIZED USERS AND TRAINING

Item 6 Authorized Users (Check both boxes)

☐ We will attach a list of each proposed authorized user with the types and quantities of licensed material to be used.

AND

☐ Information is attached demonstrating that each proposed authorized user is qualified by training and experience to use the requested licensed material.

Item 7 Training For Individuals Working In Or Frequenting Restricted Areas
(Occupationally exposed individuals and ancillary personnel) (Check box)

☐ A description of the radiation safety training program, including topics covered, groups of workers, assessment of training, qualifications of instructors and the method and frequency of training is attached.

RADIOACTIVE MATERIAL

Item 8 Radioactive Material (Attach additional pages if necessary)

UNSEALED SOURCES				
Radioisotope				
Chemical/Physical Form				
Maximum Possession Limit				
Proposed Use				

SEALED SOURCES				
Radioisotope				
Sealed Source Manufacturer or Distributor and Model Number				
Device Manufacturer or Distributor and Model Number				
Maximum Possession Limit per source and Total Maximum Possession Limit per Model				
Proposed Use				

FACILITIES AND EQUIPMENT

Item 9. Facilities and Equipment (Check all that apply and attach the requested information.)

☐ A description is provided of the facilities and equipment at each location where radioactive material will be used. Diagrams should be drawn to a specified scale, or dimensions should be indicated. For facilities where it is anticipated that more than one laboratory or room may be used, a generic laboratory or room diagram may be submitted.

NOTE: See Appendix K of VAREG 'Guidance for Academic, Research and Development and Other Licenses of Limited Scope' for guidance.

AND, IF APPLICABLE

☐ A description showing the locations of shielding, the proximity of radiation sources to unrestricted areas, and other items related to radiation safety is provided.

AND/OR

☐ For radioactive materials that may become airborne, diagrams contain schematic descriptions of the ventilation systems, with pertinent airflow rates, pressures, filtration equipment, and monitoring systems. (Diagrams are attached)

RADIATION SAFETY PROGRAM

Item 10.1 Radiation Safety Audit Program

The applicant is not required to submit its audit program to the agency for review during the licensing phase. This matter will be examined during an inspection.

Item 10.2 Radiation Monitoring Instruments (Check one box)

☐ We will use instruments that meet the radiation monitoring instruments specifications published in Appendix M of VAREG 'Guidance for Academic, Research and Development and Other Licenses of Limited Scope'. We reserve the right to upgrade our survey instruments as necessary. The instruments will be calibrated by an organization licensed by VDH, the NRC or another Agreement State to perform calibrations.

OR

☐ We will use instruments that meet the radiation monitoring instrument specifications published in Appendix M of VAREG 'Guidance for Academic, Research and Development and Other License of Limited Scope'. Additionally we will implement the model survey meter calibration program published in Appendix M of VAREG 'Guidance for Academic Research and Development and Other License of Limited Scope'. We reserve the right to upgrade our survey instruments as necessary.

OR

☐ We will provide a description of alternative equipment and/or procedures for ensuring that appropriate radiation monitoring equipment will be used during licensed activities and that proper calibration and calibration frequency of survey equipment will be performed. We reserve the right to upgrade our survey instruments as necessary.

Item 10.3 Material Receipt and Accountability (Check all that apply)

Unsealed Sources

☐ We will submit procedure(s) for ensuring radioactive material accountability.

Sealed Sources

☐ We will perform physical inventories at intervals not to exceed 6 month, to account for all sealed sources and devices received and possessed under the license. Records of inventories will be maintained for 5 years from the date of each inventory, and shall include the radionuclides, quantities, manufacturer's name and model numbers, location, individual performing inventory and the date of the inventory.

OR

☐ We will submit a description of the frequency and procedures for ensuring that no gauge has been lost, stolen or misplaced.

Item 10.4 Occupational Dosimetry (Check one box)

☐ We will maintain, for inspection by VDH, documentation demonstrating that unmonitored individuals are not likely to receive, in one year, a radiation dose in excess of 10 percent of the allowable limits in **12VAC5-481-640.**

OR

☐ We will provide dosimetry processed and evaluated by a NVLAP-approved processor that is exchanged at a frequency recommended by the processor.

Item 10.5 Public Dose

No response is required in this license application, however the licensee's evaluation of public dose will be examined during an inspection.

Item 10.6 Safe Use of Radionuclides and Emergency Procedures (Check box)

☐ We will develop, implement and maintain safe use of radionuclides and emergency procedures that will meet the criteria in the section titled "Safe Use of Radionuclides and Emergency Procedures" in VAREG 'Guidance for Academic, Research and Development and Other Licenses of Limited Scope'. (Procedures are attached)

Item 10.7 Surveys (Check all that apply)

☐ We will survey our facility and maintain contamination levels in accordance with the survey frequencies and contamination levels published in Appendix Q of VAREG 'Guidance for Academic, Research and Development and Other Licenses of Limited Scope'.

IF SEALED SOURCES ARE USED

☐ Leak tests analysis will be performed by an organization authorized by VDH, the NRC or an Agreement State to provide leak testing services to other licensees; or by using a leak test kit supplied by an organization licensed by VDH, the NRC or another Agreement State to provide leak test kits to other licensees according to kit supplier's instructions.

List the name and license number of organization authorized to perform or analyze leak test
(Specify whether VDH, NRC, or another Agreement State):

Organization Name _____ License Number _____
Issuing Agency _____

Note: An alternate organization may be used to perform or analyze leak test, without amending the license, provided the organization is specifically authorized by VDH, NRC or another Agreement State.

OR

☐ We will perform our own leak testing and sample analysis. We will follow the procedures published in Appendix R of VAREG 'Guidance for Academic, Research and Development and Other Licenses of Limited Scope'.

OR

☐ We will submit alternative procedures. (Procedures are attached)

Item 10.8 Transportation

No response is needed from applicant in this license application; transportation issues will be reviewed during inspections.

Item 10.9 Minimization of Contamination

No response is required if applicant meets the criteria in the following sections: "Unsealed and/or Sealed Sources", "Facilities and Equipment", "Safe use of Radioisotopes and Emergency Procedures", "Surveys", and "Waste Management".

Item 10.10 Termination Of Activities

☐ We will notify the agency, in writing, within 60 days of the decision to permanently cease radioactive material use per **12VAC5-481-510 D**.

Item 11 Waste Management (Check all that apply)

☐ We will follow the model waste procedures published in Appendix T of VAREG 'Guidance for Academic Research and Development and Other Licenses of Limited Scope'.

OR

☐ We will follow: ☐ Decay-In-Storage or ☐ Disposal of Liquids Into Sanitary Sewerage waste procedures that are published in Appendix T of VAREG 'Guidance for Academic Research and Development and Other Licenses of Limited Scope'.

OR

☐ We will develop, implement and maintain procedures for waste collection, storage and disposal by any of the authorized methods described in Item 11 "Waste Management" of VAREG 'Guidance for Academic Research and Development and Other Licenses of Limited Scope'. We will contact VDH for guidance to obtain approval of any method(s) of waste disposal other than those discussed in Item11 "Waste Management" of VAREG 'Guidance for Academic Research and Development and Other Licenses of Limited Scope'. (Procedures are attached)

OR

☐ If access to a radioactive waste burial site is unavailable, we will request authorization for extended interim storage of waste. We will refer to NRC IN 90-09 'Extended Interim Storage of Low-Level Radioactive Waste by Fuel Cycle and Materials Licenses', dated February 1990, for guidance and submit the required information with this applications.

IF SEALED SOURCES ARE USED

☐ We will return sealed sources/devices to the manufacturer, distributor or an organization licensed by VDH, the NRC or another Agreement State.

NOTE: Applicants do not need to provide information to VDH if they plan to dispose of LLW via transfer to another authorized recipient or to dispose of liquid scintillation media or animals containing low levels of H-3 or C-14 as authorized by **12VAC5-481-910**.

LICENSE FEE

Item 12 License Fees (Refer to **12VAC5-490**)

License fee enclosed:
☐ Yes Amount Enclosed: $

CERTIFICATION (To be signed by an individual authorized to make binding commitments on behalf of the applicant.)

Item 13

I hereby certify that this application was prepared in conformance with **12VAC5-481 'Virginia Radiation Protection Regulations'** and that all information contained herein, including any supplements attached hereto, is true and correct to the best of my knowledge and belief.

SIGNATURE - Applicant Or Authorized Individual	Date signed

Print Name and Title of above signatory