



**APPLICATION FOR A NEW RADIOACTIVE MATERIAL LICENSE
 AUTHORIZING THE USE OF SELF-SHIELDED IRRADIATORS**

The Virginia Department of Health (VDH) is requesting disclosure of information for the purpose of 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 Self Shielded Irradiators’ for additional information. Use supplementary sheets where necessary. Retain one copy and submit original of the entire application to: 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):

Telephone Number (Include area code)

() - X

LOCATION OF RADIOACTIVE MATERIAL

Item 4 Address(es) Where Licensed Material Will Be Used or Possessed (Do not use Post Office Box):

Address	Telephone Number (Include area code)
Address	Telephone Number (Include area code)
Address	Telephone Number (Include area code)

RADIATION SAFETY OFFICER

Item 5. Radiation Safety Officer (RSO) (Check one box)

RSO Name: _____ Tel (Include area code): () - X

E-mail:

The above named individual will perform all duties and responsibilities as listed in Appendix H in VAREG ‘Guidance for Self-Shielded Irradiators’ 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.

AND EITHER

Before obtaining radioactive material, the proposed RSO will have successfully completed training as described in Appendix G of VAREG ‘Guidance For Self-Shielded Irradiators’.

OR

Alternative information demonstrating that the proposed RSO is qualified by training and experience is attached. (attach evidence of training and experience)

AUTHORIZED USERS

Item 6 Authorized Users (Check one box)

- Before using radioactive material, authorized users will have received training as described in Appendix G in VAREG ‘Guidance for Self-Shielded Irradiators.’

OR

- A description of the training and experience for proposed authorized users is attached.
-

RADIOACTIVE MATERIAL

Item 7 Radioactive Material (Attach additional pages if necessary)

Element and mass number	Maximum quantity requested for each radionuclide:
Device manufacturer or distributor and model number:	Intended use:

FACILITIES AND EQUIPMENT

Item 8 Facilities And Equipment (Check all that apply)

- Diagrams of radioactive material area(s) of use are attached.

AND EITHER

- We will ensure that each area where a self-shielded irradiator is located corresponds to the “Conditions of Normal Use” and “Limitations and/or Other Considerations of Use” on the applicable irradiator’s Sealed Source and Device Registration Certificate; the floor beneath the self shielded irradiator is secured to prevent unauthorized access or removal; and each area where a self shielded irradiator is located is equipped with an automatically operated fire detection and control system (sprinkler, chemical, or gas) or the location of the area and other controls ensure a low-level radiation risk attributable to fires.

OR

- We will submit alternative information; be sure to include justification for placing an irradiator in an area that does not correspond to the “Conditions of Normal Use” and the “Limitations and/or Other Considerations of Use”.
-

RADIATION SAFETY PROGRAM

Item 9 Radiation Safety Program

Item 9.1 Audit Program

The applicant is not required to, and should not, submit its audit program to the agency for review. This matter will be examined during inspection.

Item 9.2 Radiation Monitoring Instruments (Check one box)

- We will use instruments that meet the radiation monitoring instrument specifications published in Appendix K of VAREG ‘Guidance for Self-Shielded Irradiators’. Additionally, each survey meter will have been calibrated by the manufacturer or other person authorized by VDH, the NRC or another Agreement State to perform survey meter calibrations no more than 12 months before the date the meter is used.

OR

- We will use instruments that meet the radiation monitoring instrument specifications published in Appendix K of VAREG ‘Guidance for Self-Shielded Irradiators’. Additionally, we will implement the model survey meter calibration program published in Appendix K of VAREG ‘Guidance for Self-Shielded Irradiators’ and we ensure that each survey meter will have been calibrated no more than 12 months before the date the meter is used.

OR

- We will have access to survey equipment and/or procedures for ensuring that interlocks function, as required, to return moving self shielded irradiator sources to the shielded position and/or determining source shielding integrity after an incident involving the self shielded irradiator.
-

Item 9.3 Material Receipt And Accountability (Check box)

- Physical inventories will be conducted at intervals not to exceed 6 months, 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.

Item 9.4 Occupational Dose (Check one box)

- We will maintain, for inspection by the agency, 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 **12 VAC 5-481-640**.

OR

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

Item 9.5 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 9.6 Operating And Emergency Procedures (Check one box)

- We will develop, implement, maintain and distribute operating procedures that will meet the Criteria in the section titled "Operating and Emergency Procedures" in VAREG 'Guidance for Self-Shielded Irradiators'. (Procedures are attached)

OR

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

Item 9.7 Leak Tests (Check one box)

- Leak tests analysis will be performed by an organization authorized by VDH, the NRC or another 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 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 _____
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 leak testing and sample analysis and will follow the model procedures in Appendix P of VAREG 'Guidance for Self-Shielded Irradiators'. (Procedures are attached)

OR

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

Item 9.8 Maintenance (Check one box for Routine Cleaning and Lubrication and one for Non-Routine Maintenance)

ROUTINE CLEANING AND LUBRICATION:

- We will implement and maintain procedures for routine maintenance of our self shielded irradiators according to each manufacturer's (or distributor's) written recommendations and instructions.

OR

- Alternative procedures are attached.

NON-ROUTINE MAINTENANCE:

- We will have the self shielded irradiator manufacturer (or distributor) or other person authorized by VDH, the NRC or another Agreement State perform the non-routine maintenance.

OR

- We will provide procedures that address the information listed in Appendix I of VAREG 'Guidance for Self-Shielded Irradiators' supporting a request for authorization to perform this work. (Procedures are attached)
-

Item 9.9 Transportation (Check one box)

We choose to transfer possession of radioactive material to an irradiator manufacturer, distributor or service licensee with a VDH, NRC or another Agreement State license who then acts as the shipper.

OR

Before offering a Type B package for shipment we will be registered with the NRC as user of the package and obtain VDH approval of our QA program.

DISPOSAL, TRANSFER AND LICENSE TERMINATION

Item 10 Disposal, Transfer and License Termination

Item 10.1 Disposal And Transfer (Check Box)

We will return the source to the manufacturer for disposal or transfer the device to a specific licensee authorized to receive radioactive material.

Item 10.2 Termination Of Activities (Check box)

We will notify the agency, in writing, within 30 days of the decision to permanently cease radioactive material use (**12VAC5-481-500**).

LICENSE FEE

Item 11 License Fees (Refer to **12 VAC 5-490.**)

License fee enclosed:

Yes Amount Enclosed \$

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

Item 12

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