



## APPLICATION FOR A NEW RADIOACTIVE MATERIAL LICENSE AUTHORIZING THE USE OF INDUSTRIAL RADIOGRAPHY

The Virginia Department of Health (VDH) is requesting disclosure of all 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 Industrial Radiography Use.' 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:**

**Applicant's Telephone Number** (Include area code):

**Item 3 Person To Contact Regarding Application:**

Name:

E-mail:

Telephone Number (Include area code)

(    )    -    X

### LOCATION OF RADIOACTIVE MATERIAL

**Item 4 Location of Radioactive Material** (Do not use Post Office Box):

- ☐ Used  
☐ Stored  
☐ Used and Stored

Address:

Telephone Number (Include area code):

☐ Permanent Cell Facility

- ☐ Used  
☐ Stored  
☐ Used and Stored

Address:

Telephone Number (Include area code):

☐ Permanent Cell Facility

- ☐ Used  
☐ Stored  
☐ Used and Stored

Address:

Telephone Number (Include area code):

☐ Permanent Cell Facility

Is industrial radiography performed at temporary job sites?: ☐ Yes ☐ No

**RADIATION SAFETY OFFICER**

**Item 5 Radiation Safety Officer (RSO) (Check all that apply)**

- ☐ The name of the proposed RSO and other potential designees 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**

- ☐ We will demonstrate that the RSO has sufficient independence and direct communication with responsible management officials by providing a copy of an organizational chart by position and will confirm that the RSO has day-to-day oversight of the radiation safety activities.

**AND EITHER**

- ☐ We will provide the specific training and experience of the RSO. Include the following:
1. Specific dates of certification and/or training in radiation safety.
  2. Documentation to show that the RSO has a minimum of 2,000 hours of hands-on experience as a qualified radiographer in industrial radiographic operations.
  3. Documentation to show that the RSO has obtained formal training in the establishment and maintenance of a radiation protection program.

**OR**

- ☐ We will provide alternative information demonstrating that the proposed RSO is qualified by training and experience (e.g. Board Certification by the American Board of Health Physicists, completion of a bachelor's and/or master's degree in the sciences with at least one year of experience in the conduct of a radiation safety program of comparable size and scope) documentation to show that the RSO has obtained formal training in the establishment and maintenance of a radiation protection program.

**TRAINING FOR RADIOGRAPHERS AND RADIOGRAPHER'S ASSISTANTS**

**Item 6 Training For Radiographers and Radiographer's Assistants (Check box and attach requested information)**

- ☐ We will submit the information outlined in section titled 'Training for Radiographers and Radiographer's Assistants' in VAREG 'Guidance for Industrial Radiography Use'.

**RADIOACTIVE MATERIAL**

**Item 7 Sealed Source Radioactive Material (Attach additional pages if necessary)**

Element and mass number	Exposure device manufacturer and model number
Maximum activity per radionuclide and total maximum activity in possession	Source changer manufacturer and model number

Is Depleted Uranium used as a shielding material? ☐ Yes ☐ No

Only radiographic exposure devices, source assemblies or sealed sources, and associated equipment which meets the requirements specified in 12VAC5-481-1210 will be used in radiographic operations. ☐ Yes ☐ No

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**FINANCIAL ASSURANCE AND RECORDKEEPING FOR DECOMMISSIONING**

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**Item 8 Financial Assurance and Recordkeeping For Decommissioning** (Check both boxes)

- ☐ We shall maintain drawings and records important to decommissioning and will transfer these records to a new licensee before licensed activities are transferred in accordance with 12VAC5-481-500 B or assign the records to the agency before the license is terminated.

AND

- ☐ If financial assurance is required, submit evidence per 12VAC5-481-450 C.

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**FACILITIES AND EQUIPMENT**

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**Item 9 Facilities and Equipment** (Check box and attach requested information)

- ☐ We will submit the required information as listed in the section titled 'Facilities and Equipment' of VAREG 'Guidance for Industrial Radiography Use'.

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**RADIATION SAFETY PROGRAM**

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**Item 10 Radiation Safety Program**

**Item 10.1 Radiation Safety Program Audit**

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 Termination Of Activities** (Check box)

- ☐ We will notify the agency, in writing, within 60 days of the decision to permanently cease radioactive material use. (12VAC5-481-500)

**Item 10.3 Instruments** (Check all boxes that apply)

- ☐ We will possess and use radiation survey meter(s) that meets the Criteria in the section titled 'Instruments' in VAREG 'Guidance for Industrial Radiography Use'.

AND EITHER

- ☐ The calibration will be performed by a VDH, NRC or another Agreement State licensee specifically authorized to perform instrument calibration.

OR

- ☐ We will follow the survey meter calibration procedures in accordance with Appendix J in VAREG 'Guidance for Industrial Radiography Use'.

OR

- ☐ We will submit alternate procedures. (Procedures are attached)

Note: Identify the qualifications of the individuals who will perform the calibrations if performed by the applicant.

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**Item 10.4 Material Receipt and Accountability** (Check box)

- ☐ Quarterly physical inventories (not to exceed 3 months) will be conducted of all sealed sources and/or devices containing radioactive material (including depleted uranium) and the information contained in the discussion section titled 'Material Receipt and Accountability' in VAREG 'Guidance for Industrial Radiography Use' will be documented.

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**Item 10.5 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 suppliers' 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 Entity \_\_\_\_\_

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, the NRC or another Agreement State.

OR

- ☐ We will perform our own leak testing and sample analysis. We will follow the procedures in Appendix K of VAREG 'Guidance for Industrial Radiography Use.'

OR

- ☐ We will submit alternative procedures. (Procedures are attached)
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**Item 10.6 Occupational Dosimetry** (Check all boxes that apply)

- ☐ We will provide dosimetry processed and evaluated by a NVLAP-approved processor that is exchanged monthly.

AND

- ☐ The required personnel monitoring equipment, including 0 to 2 mSv (200 mrem) dosimeters or electronic personal dosimeters, will be worn by radiographic personnel.

AND

- ☐ Alarming ratemeters set to alarm at plus or minus 20% of 500 mrem/hour will be worn by all radiography personnel.

**Note:** Radiography personnel at permanent radiography installations where other appropriate alarming or warning devices are in use do not need alarming ratemeters.

AND

- ☐ Pocket dosimeters and alarm ratemeters will be checked for correct response at intervals not to exceed 12 months.

AND EITHER

- ☐ If adjustment is necessary, the devices will be returned to the manufacturer.

OR

- ☐ If adjustment is necessary, procedures for adjustments are described.

**Item 10.7 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 10.8 Quarterly Maintenance** (Check both boxes)

- ☐ We have included procedures for quarterly maintenance as part of the operating and emergency procedures.

AND

- ☐ Before using a new sealed source/device combination, we will have written inspection and maintenance procedures that address the use of new equipment as a Type B transport package. In addition, we will provide training to radiographic personnel before using a new sealed source/device combination.

**OPERATING AND EMERGENCY PROCEDURES**

**Item 10.9 Operating and Emergency Procedures**

Operating and emergency procedures must be submitted to the agency for review.

**Item 10.9.1 Handling and Use Of Sealed Sources and Radiography Exposure Devices** (Check box)

- ☐ We have included the following in the operating and emergency procedures:  
Step-by-step instructions for using each type of radiographic devices;  
Instructions for performing source exchanges; and  
Instructions for crankout devices should be separate from those for pipeliner devices.

**Item 10.9.2 Methods and Occasions For Conducting Radiation Surveys** (Check box)

- ☐ We have included in the operating and emergency procedures all surveys as described in the section titled 'Methods and Occasions For Conducting Radiation Surveys' in VAREG 'Guidance for Industrial Radiography Use'.

**Item 10.9.3 Methods For Controlling Access To Radiographic Areas** (Check box)

- ☐ We have included procedures to control access to radiographic operations and storage areas in the operating and emergency procedures.

**Item 10.9.4 Methods and Occasions For Locking and Securing Radiographic Exposure Devices, Storage Containers, and Sealed Sources** (Check box)

- ☐ We have included procedures for locking and securing radiographic equipment in the operating and emergency procedures.

**Item 10.9.5 Personnel Monitoring and The Use Of Personnel Monitoring Equipment** (Check box)

- ☐ We have included instructions for proper use of personnel monitoring equipment in the operating and emergency procedures.

**Item 10.9.6 Transporting Sealed Sources To Field Locations, Securing Exposure Devices and Storage Containers In Vehicles, Posting Vehicles, and Controlling Sealed Sources During Transportation** (Check one box)

- ☐ We have included procedures for transporting sealed sources containing radioactive material, exposure devices, and source changers in the operating and emergency procedures.

OR

- ☐ Not Applicable (Devices are not transported)

**Item 10.9.7 Daily Inspection and Maintenance Of Radiography Equipment** (Check box)

- ☐ We have included procedures for daily inspection and maintenance of radiography equipment in our operating and emergency procedures.

**Item 10.9.8 Ratemeter Alarms Or Off-Scale Dosimeter Readings (Check box)**

☐ We have addressed ratemeter alarms or off-scale dosimeters in the operating and emergency procedures.

**Item 10.9.9 Procedure For Identifying and Reporting Defects and Non-Compliance (Check box)**

☐ We have included procedures for notifying management of equipment malfunction or defect in the operating and emergency procedures.

**Item 10.9.10 Required Notifications (Check box)**

☐ We have included appropriate instructions for notifying the RSO and/or other personnel in the operating and emergency procedures.

**Item 10.9.11 Minimizing Exposure Of Persons In The Event Of An Accident (Check box)**

☐ We have included instructions for minimizing exposure of persons in the event of an accident in the operating and emergency procedures.

**Item 10.9.12 Source Retrieval (Check one box)**

☐ We will not perform source retrieval and will use the services of a person specifically licensed by VDH, NRC or another Agreement State to perform the retrievals of our sources.

**OR**

☐ We will perform source retrieval. We have included source retrieval procedures in the operating and emergency procedures and submit specific training for agency review.

**Item 10.9.13 Maintenance Of Records (Check box)**

☐ We have included procedures which ensure proper maintenance of records in the operating and emergency procedures.

**WASTE MANAGEMENT**

**Item 11 Waste Management (Check box)**

☐ We will return the radiography sealed source(s) to the manufacturer for disposal or transfer the radiography sealed source(s) to a specific licensee authorized by VDH, the NRC or another Agreement State to receive radioactive material.

**LICENSE FEE**

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

Application 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