



RADIOACTIVE MATERIALS (RAM) PROGRAM

New/Renewal Veterinary License Checklist

Licensee:

License Number:

- ☐ **Review the NUREG-1556 Volumes 7 and 9** (obtain the current revision from the website). <https://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1556/index.html>
- ☐ **Submit the Application** signed by executive management, or a person authorized to make commitments for the business entity requesting/possessing the license. If signed by someone other than senior management or Radiation Safety Officer(RSO) /Alternate Radiation Safety Officer (ARSO) provide a non-RSO delegation of authority form:
[https://dpbh.nv.gov/Reg/RAM/dta/Forms/Radioactive_Material_Program_\(RAM\)-_Forms/](https://dpbh.nv.gov/Reg/RAM/dta/Forms/Radioactive_Material_Program_(RAM)-_Forms/).
- ☐ **Financial Assurance, Decommissioning and Emergency Plans:**
 - ☐ If financial assurance is required, submit documentation required by Nevada Administrative Code (NAC) 459.1995.
 - ☐ If an emergency plan is required per NAC 49.1951, submit the plan required by NAC 459.195.
- ☐ **Materials:** Mark all materials below that are requested and submit the use for each section.

Radioactive Material	Form	Maximum Quantity
<input type="checkbox"/> Any radioactive material permitted by 10 CFR 35.100.	Any	As needed
<input type="checkbox"/> Any radioactive material permitted by 10 CFR 35.200; except gasses, generators and PET radioisotopes	Any	As needed
<input type="checkbox"/> PET _____ (list isotope) permitted by 10 CFR 35.200.	Liquid or other form	_____ mCi (_____ GBq); _____ mCi (_____ GBq) per dose
<input type="checkbox"/> Iodine-131 permitted by 10 CFR 35.300	Sodium Iodide capsules (commitment to capsules for a reduced bioassay condition), Liquid	_____ mCi (_____ GBq); _____ mCi (_____ GBq) per dose

Radioactive Material	Form	Maximum Quantity
<input type="checkbox"/> Any radioactive materials permitted by 10 CFR 35.65	Any form permitted by 10 CFR 35.65	As permitted by 10 CFR 35.65
<input type="checkbox"/> Other: List isotope	List form:	_____ List Units
<input type="checkbox"/> Other: List isotope	List form:	_____ List Units
<input type="checkbox"/> Other: List isotope	List form:	_____ List Units
<input type="checkbox"/> Other: List isotope	List form:	_____ List Units
<input type="checkbox"/> Other: List isotope	List form	_____ List Units

☐ **Storage and use facility address and diagram**

- ☐ Provide the addresses for the business office and use facility as applicable.
- ☐ Provide a facility diagram, with the following details as applicable: indication of north; labeled immediate/surrounding rooms, hallways, storage area, secure areas; occupancy factors; alarm system component including cameras, sensors; and scale or physical dimensions of facility / building.
- ☐ For licensees using PET isotopes submit shielding report and commitments to shielding.
- ☐ Describe means of preventing access to unauthorized personnel. Include information and training for receiving staff if materials are received outside of normal business hours.
- ☐ Submit a copy of the Landlord Acknowledgement of Responsibilities Related to Radioactive Materials form available at:
[http://dpbh.nv.gov/uploadedFiles/dpbhnavgov/content/Reg/Radoactive-Mtl/Docs/LandlordAcknowledgementForm\(11-17-15\).pdf](http://dpbh.nv.gov/uploadedFiles/dpbhnavgov/content/Reg/Radoactive-Mtl/Docs/LandlordAcknowledgementForm(11-17-15).pdf)
- ☐ Submit a copy of local business license with the storage address and a state business license.

☐ **Authorized Users AUs:**

- ☐ Submit a complete list of all AUs and their authorized uses.
- ☐ Submit a current Nevada State Board of Veterinary Medical Examiners certificate/printout for each AU or new veterinarian to be added to the license.

- ☐ Provide proof of training and experience for any new veterinarian to be added as an AU with the following options. See the :Training for Veterinary RSO/AU document available at:
[https://dpbh.nv.gov/Reg/RAM/dta/Forms/Radioactive_Material_Program_\(RAM\)_-_Forms//](https://dpbh.nv.gov/Reg/RAM/dta/Forms/Radioactive_Material_Program_(RAM)_-_Forms//)
- ☐ Submit a current RAM license from the Nuclear Regulatory Commission (NRC), another agreement state or the State of Nevada for the same use(s) as requested for the new AU, or
- ☐ Submit a copy of an approved specialty board certification in Radiology or Radiation Oncology by the American College of Veterinary Radiology, or
- ☐ Submit a completed NRC form 313A appropriate for the desired use. The forms and instructions can be found from:
[https://dpbh.nv.gov/Reg/RAM/dta/Forms/Radioactive_Material_Program_\(RAM\)_-_Forms/](https://dpbh.nv.gov/Reg/RAM/dta/Forms/Radioactive_Material_Program_(RAM)_-_Forms/).
- ☐ **RSO / ARSO:**
 - ☐ Submit an organizational chart showing the RSO / ARSO relationship with management.
 - ☐ Submit a completed Delegation of Authority form for the RSO / ARSO or RSO / ARSO candidates (same form is used for both the RSO and ARSO is using both):
http://dpbh.nv.gov/uploadedFiles/dpbhnavgov/content/Reg/Radoactive-Mtl/Docs/RSO_DelegationAuthority.pdf
 - ☐ Provide proof of training and experience for any new veterinarian to be added as an AU with the following options. See the :Training for Veterinary RSO / AU document available at:
[https://dpbh.nv.gov/Reg/RAM/dta/Forms/Radioactive_Material_Program_\(RAM\)_-_Forms//](https://dpbh.nv.gov/Reg/RAM/dta/Forms/Radioactive_Material_Program_(RAM)_-_Forms//)
 - ☐ Submit a current RAM license from the Nuclear Regulatory Commission (NRC), another agreement state or the State of Nevada for the same use(s) as requested for the new RSO / ARSO, or
 - ☐ Submit a copy of an approved specialty board certification in Radiology or Radiation Oncology by the American College of Veterinary Radiology, or
 - ☐ Submit a completed NRC form 313A appropriate for the desired use. The forms and instructions can be found from:
[https://dpbh.nv.gov/Reg/RAM/dta/Forms/Radioactive_Material_Program_\(RAM\)_-_Forms/](https://dpbh.nv.gov/Reg/RAM/dta/Forms/Radioactive_Material_Program_(RAM)_-_Forms/).
- ☐ **Sealed Source RAM Inventory Policy & Procedure**
 - ☐ Submit a completed current inventory initialed by the RSO. (Renewals only)

- ☐ Commit to performing and documenting a physical inventory every six-months and maintaining records of the inventory for three years.
- ☐ Commit to leak testing as recommended by the manufacturer or Sealed Source and Device Registry, maintaining records of the leak checks for at least three years, and provide the following as applicable:
 - ☐ Provide the name of the company performing leak checks.
 - ☐ If self-analyzing leak test, submit procedures for analysis and equipment used for completing the leak test including proof of acceptable minimum activity detectable.
 - ☐ Provide a list of staff trained to perform leak tests if other than the RSO and submit their training records.
- ☐ **Dosimetry:** Review NUREG 1556 Volume 9 – Appendix M
 - ☐ Provide the name of your current/planned dosimetry provider (must be NVLAP approved).
 - ☐ List the exchange frequency.
 - ☐ List the type of dosimetry used (whole body / extremity) (optically stimulated and thermoluminescent).
 - ☐ Commit to maintaining control badges and exposure records indefinitely.
 - ☐ Commit to having dosimetry records on site for agency technologist and students working/training at the facility.
 - ☐ Commit to all staff wearing personal dosimetry when working with RAM.
 - ☐ Policies and procedures for bioassay screening if using volatile forms of Iodine-131
- ☐ **ALARA Program:**
 - ☐ Commit to an annual review of the Radiation Protection Plan/Policy/Procedure.
 - ☐ Commit to an annual review of all written directives where applicable.
 - ☐ Commit to posting “Caution Radioactive Material” and “Caution Radiation Area” signs appropriately.
 - ☐ Commit to posting the current NRC1 “Notice to Employees” signage.
 - ☐ Commit to annual radiation safety training for technologists and ancillary staff as applicable.
 - ☐ Commit to having all staff that ship, pack or determine shipping of RAM will have current HAZMAT shipping training.
 - ☐ Provide a public dose estimate.

- ☐ **Training:** Review NUREG 1556 Volume 9, Appendix J
 - ☐ Commit to having training records on site for agency technologist and students working/training at this facility.
 - ☐ Commit to an annual training assessment and implementation per NUREG 1556 volume 9.
- ☐ **Radiation Monitoring Equipment:** Review NUREG 1556 volume 9 – appendix K
 - ☐ Submit meter manufacturer, model and serial numbers, probes, and use (rate -v- contamination).
 - ☐ Commit to annual calibration of survey meters and to maintaining records for three years.
 - ☐ Submit the name of the company performing the calibration.
 - ☐ If performing calibrations locally, provide a copy of calibration procedures.
- ☐ **Dose Calibrator:** Review NUREG 1556 volume 9 – appendix G
 - ☐ If not using a dose calibrator per 10 CFR 35.63. commit to the following: “We will use decay correction from the unit doses from the radiopharmacy prescription.”
 - ☐ Commit to calibration in accordance with national standard or per manufacturer’s instructions.
 - ☐ Commit to maintaining records of dose calibrator calibration for three years and until replaced by a newer calibration for those completed less than annually (geometry).
- ☐ **Area Surveys:** Review NUREG 1556 Volume 9 – appendix R
 - ☐ Provide a map of daily radiation survey points and provide the associated trigger levels
 - ☐ Provide a map of weekly wipe survey points and provide the associated trigger levels
 - ☐ Commit to maintain survey records for three years.
- ☐ **Safe Use of Unsealed Materials:** Review NUREG 1556 Volume 9 – appendix T
 - ☐ Submit the policy and procedure for the safe use of unsealed material.
- ☐ **Emergency and Spill Procedures:** Review NUREG 1556 Volume 9 – appendix N
 - ☐ Submit emergency policies/procedures including those incident response procedures (fire, theft, damage) and reporting requirements. Ensure the procedures are marked as Official Use Only – Security-Related Information as needed.

- ☐ Add the State of Nevada emergency numbers and RSO contact information to postings and procedures.

Radiation Control Program (8:00 am–5:00 pm M-F)	(775) 687-7550
Radiation Control Program 24 hr Emergency Number	(877) 438-7231
Nevada Highway Patrol (24 hrs)	(775) 687-0400

- ☐ **Order and Receipt of Materials:** Review NUREG 1556 Volume 9 – Appendix O
 - ☐ Submit policies and procedures for the ordering and receipt of materials.
- ☐ **Opening Packages containing RAM:** Review NUREG 1556 Volume 9 – Appendix P
 - ☐ Submit policies and procedures for opening packages containing RAM.
- ☐ **Animals used for veterinary medicine radiation safety procedures:** Review NUREG 1556 Volume 7 – Appendix H
 - ☐ Provide the policy and procedures for staff training for the care of animals undergoing treatment and/or imaging using radioactive materials.
 - ☐ Provide the policy for contamination control regarding the care of animals undergoing treatment and/or imaging using radioactive materials.
 - ☐ Provide the policy and procedures for the release of animals and the instructions provided to their care takers regarding care of animals following treatment and/or imaging using radioactive materials.
- ☐ **Waste Management:** Review NUREG 1556 Volume 9 – Appendix W
 - ☐ Submit decay in storage policy and procedures for waste with a half-life of 120 days or less.
 - ☐ Commit that the transfer or disposal of sealed sources and radioactive waste will be conducted by either transferring it to a licensed radioactive waste broker, returned to the manufacturer, or by transferring it to a specific licensee authorized to possess the material.
 - ☐ Commit to maintain records of receipt, transfer, and disposal of all sealed sources received and possessed under the license.
 - ☐ Commit that license termination will be conducted in compliance with Nevada Administrative Code (NAC) 459.200.
- ☐ **Mobile Imaging:** Review NUREG 1556 Volume 9 - Appendix V
 - ☐ Explain the Method of transportation:
 - ☐ A coach (self-contained, materials stay with vehicle); include the VIN for the coach.

- ☐ A van (materials & camera will enter use locations) Include the address for each use location.
- ☐ Submit a Memorandum of Understanding (MOU) for each location of use.
- ☐ Submit a facility diagram for each coach/trailer and the dispatch/hub location.
- ☐ Commit to transporting all radioactive materials in accordance with U.S. DOT regulations.
- ☐ Submit the Type A shipping container documentation for all shipping containers used to ship type A quantities of radioactive materials. Mark drawing and documentation as noted in NUREG 1556 Volume 9 page 6-1 as appropriate.

CERTIFICATION

The Applicant understands that all commitments that are marked above are binding and considered part of the license application; if not applicable, DO NOT mark. All applicable items that require submission must accompany the application, license fee and this checklist.

Printed Name Certifying Officer_____
Title_____
Signature_____
Date