



Radioactive Materials (RAM) Industrial Radiography Licensing Checklist

Licensee _____ Lic.# _____

- Submit 1 copy only.** Number all pages sequentially that are submitted for review. (Properly mark all appropriate information “Official Use Only – Security-Related Information”)
- Review the NUREG-1556 Volume 2** It can be used as guidance to complete this checklist.
 - Submit all Policy and Procedures to the Nevada Radiation Control Program.
<http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1556/>
- Submit the Application** signed by executive management or a person authorized to sign original documents.
 - Submit an organizational chart and a Delegation of Authority form with wet signatures.
http://dpbh.nv.gov/uploadedFiles/dpbhngov/content/Reg/Radoactive-Mtl/Docs/RSO_DelegationAuthority.pdf
- Financial Assurance, Decommissioning and Emergency Plans:**
 - If financial assurance is required, submit documentation required by NAC 459.1955.
 - If emergency Plan is required per NAC 459.1951, submit the plan required by NAC 459.195.
- Storage and use facility address and diagram**
 - Include the addresses of the business office & use facility if different.
 - Submit a facility Diagram including; Scale, the direction **↑** north, identify the camera storage location, label each area surrounding the camera storage location.
 - For cells; identify the type, thickness, and density of shielding materials on all sides, including the floor and the roof, and the visible-audible alarm.
 - Describe the means of preventing access to unauthorized personnel and a description of the two tangible barriers used in securing the storage location.
 - Commit to “Radiation Area” signs & “High Radiation Area” signage as required, including the roof.
 - Label the alarm, cameras & motion detectors on the diagram.
 - Submit a letter from the land lord stating that they are aware of the storage/use of RAM.
[http://dpbh.nv.gov/uploadedFiles/dpbhngov/content/Reg/Radoactive-Mtl/Docs/LandlordAcknowledgementForm\(11-17-15\).pdf](http://dpbh.nv.gov/uploadedFiles/dpbhngov/content/Reg/Radoactive-Mtl/Docs/LandlordAcknowledgementForm(11-17-15).pdf)
 - Submit a copy of State or local business license with the storage address.
- Authorized Users**
 - Submit name(s) and include training certificates: current HAZMAT / RAD Safety / IR cards from a certifying entity.
 - Commitment that each employee will complete device manufacturer’s training program or equivalent before using a device. A current list of users shall be maintained by the RSO.
 - Submit operating and emergency procedures that include instructions for source retrieval procedures and specific training.
- Radiation Safety Officer (RSO), and if applicable, Alternate RSO (ARSO)**
 - Submit training certificates for Radiation Safety, current HAZMAT, and RSO training. Suggested training requirements are found in NUREG 1556 Vol. 2
 - Submit a copy of a RAM license listed as RSO (if available) & Delegation of Authority for each.
- Dosimetry Policy & Procedure**
 - Provide the name of your dosimetry provider (must be NVLAP approved) and list the exchange frequency.
 - Commit to maintaining control badges for accurate dose assessment.
 - Commit to wearing dosimetry (badge, audible alarm & pocket dosimeter) when using materials.
 - Submit operating and emergency procedures to address rate meter alarms or off-scale dosimeters.
 - Commit to perform surveys and monitoring to ensure compliance with dose limits for the public for areas where cameras are stored and/or cell radiography is performed.

Devices & Inventory Policy & Procedure

- Submit a current inventory with the date and RSO initials, the manufacturer, model no. & serial no. for each device (Camera & exchanger), nuclide and activity of each sealed source, and the location.
- Commit to performing and documenting a physical inventory every 3 months.
- Commit to submit in writing an updated inventory to RCP when cameras are +/- from inventory.
- Commit to Leak Testing as per manufacturer (Including DU) and submit:
 - Include the name of the company supplying kits and analyzing the leak tests.
 - If they are self-analyzed, submit Licensee's procedures for analysis.
 - List of Users to perform leak tests other than the RSO, & submit their training.
- Submit a copy of most recent leak test results for each camera.
- Describe the use of each device.
- Commit to submitting inventory information as required by the National Source Tracking System (NSTS).
- Indicate whether radiography and source exchanges will be performed at the place of business outside of a permanent facility as if the work were "in the field."

Radiation Survey Instruments Policy & Procedure

- Commit to a semi- annual (6 months) calibration of Survey instruments
 - Include the name of the company performing calibration.
- Commit to calibrating audible alarms at least annually.
- Commit to calibrating pocket dosimeters at least annually.

Quarterly Maintenance Policy & Procedure

- Commit to documenting Quarterly maintenance checks of all equipment.
- Commit to withdrawing equipment that fails inspection, until repaired and evaluated for return.
- Commit to a written inspection before using a new source/device combination.

Operating and Emergency Policy & Procedures

- Commit to an annual Audit program of the radiation safety program.
- Submit operating procedures for daily inspection and maintenance of radiographic equipment.
- Submit operating procedures for notifying management of equipment malfunction or defect.
- Submit step by step procedures for use of the device or commit to the manufacturer's instructions.
- Submit emergency procedures for workers to use in case of Incident Response (damage, theft or loss) and the reporting requirements.
- Submit Training Certificate and emergency procedures if requesting to be approved for source retrieval; or submit the name of the contractor that will perform this service.
- Include the contact information for those who should be notified (cell, office, fax & email)
RSO & Nevada RCP- contact numbers.

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

- Commit to cameras will be used, transported, and stored in such a way that members of the public will not receive more than 100 millirem (mrem) in one year, and the dose in any unrestricted area will not exceed 2 mrem in any one hour from licensed operations.

Camera/Device Transportation Policy & procedures

- Submit procedures for temporary storage of the device when not in use or under physical surveillance. Describe the two tangible barriers used to secure the device (i.e. two independently keyed/combination locks).
- Submit procedures for transportation of the device. A detailed description of how cameras are blocked and braced during transportation, pictures may be submitted.
- Commit that all RAM will be transported in accordance with U.S. DOT regulations (49 CFR).
 - Provide documentation of registration with the USNRC to use Type B packages, as required by 49 CFR 173.471a "The offeror shall be registered with the USNRC as a party to the packaging approval, and make the shipment in compliance with the terms of the packaging approval".
- Commit that all users will have HAZMAT training prior to transporting RAM.

Training of Radiographers & Assistants

- Submit an outline of the training to be given to prospective radiographers and radiographer's assistants.
- Submit your procedures for experienced radiographers who have worked for another licensee.
- Provide a copy of a typical examination and the correct answers to the examination questions. Indicate the passing grade.
- While you do not need to provide a description of the training and examination program in the topics listed in 10 CFR 34.43(g), all other training program descriptions must still be submitted.
- Specify the qualifications of your instructors in radiation safety principles and describe their experience with radiography. If training will be conducted by someone outside the applicant's organization, identify the course by title and provide the name and address of the company providing the training.
- Describe the field (practical) examination that will be given to prospective radiographers and radiographer's assistants.
- Describe the annual refresher training program, including topics to be covered and how the training will be conducted.
- Submit your procedures for verifying and documenting the certification status of radiographers and for verifying that their certification remains valid.
- Submit a description of your program for inspecting the job performance of each radiographer and radiographer's assistant at intervals not to exceed 6 months, as described in 10 CFR 34.43(e).

Disposal Policy & Procedure

- The transfer or disposal will be conducted by returning to the manufacturer, transferring to another specific licensee or a licensed waste broker specifically authorized to possess the camera/device.
- Commitment to maintain records of receipt, transfer, and disposal of all sealed sources and devices received and possessed under the license.
- Commitment that license termination will be conducted in compliance with Nevada Administrative Code (NAC) 459.200.

Materials Control & Security Checklist

(Formerly Increased Controls)

Review the 10 CFR 37 and NUREG 2155 as guidance to complete this checklist

- Submit all Policy and Procedures to the Nevada Radiation Control Program
<http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr2155/>

Personnel Access Authorization: 10 CFR 37 Subpart B

- Submit the name and title of the Reviewing Official (RO)
- Develop, implement, maintain **AND SUBMIT** an Access Authorization Program per 10 CFR 37.23
 - Commit to reviewing this program every 12 months, and maintaining these records for three years
- Commit to maintain a list of approved individuals with unescorted access &/or access to Safeguards Information per 10 CFR 37.23
 - Commit to maintaining these unescorted access lists for three years after being superseded or replaced

Physical Protection Requirements during use: Subpart C

- Develop, implement, maintain **AND SUBMIT** a security program per 10 CFR 37.41
 - Commit to reviewing the following every 12 months 10 CFR 37.55
 - Current security plan
 - Initial & refresher training on the security program, and
 - Implementation procedures
 - Commit to developing and maintaining written procedures that document how the security plan will be met
 - Commit to performing initial and refresher security training every 12 months
 - Commit to maintaining the following for three years after being superseded or replaced

- Current & previous security plan
- Initial & refresher training on the security program, and
- Implementation procedures
- Commit to LLEA coordination, updating every 12 months & maintain for 3 years per 10 CFR 37.45
- Commit to developing, implementing & maintaining security zones per 10 CFR 37.47
- Commit to monitoring and detecting all entries into the security zones per 10 CFR 37.49
 - Commit to a maintenance and testing program per 10 CFR 37.51
- Commit to requirements for mobile devices per 10 CFR 37.53 (if applicable)
- Commit to Event Reporting per 10 CFR 37.57

Physical Protection in Transit: Subpart D

- Commit to using the NRC License Verification System (LVS) or contacting the licensing agency prior to shipping Category 1 or 2 quantities to any other licensee per 10 CFR 37.71 to 37.79
- Commit to maintaining the verifications for three years
- Commit to implementing the Reporting of Events to LLEA, RCP, and the NRC per 10 CFR 37.81

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.

CERTIFYING OFFICER — PRINTED NAME

TITLE

SIGNATURE

DATE