

Licensing Guidance for Moisture/Density Portable Gauges

This supplement is intended for use by applicants desiring to obtain licensure, amendments or renewal for authorization to possess portable gauges containing sealed sources of radioactive material.

1. NEW and RENEWAL Applications for a Radioactive Material License

Include the following information with a letter requesting a new or renewed radioactive materials license:

- A. Include a fully completed "Radioactive Material License Application", form (RH 2050), executed by an individual with financial and legal responsibility for the company accompanied by appropriate fees. Include the printed name and title of the individual signing the application (Item 14).

If more space is required, the information specified on form RH 2050 may be provided on attachments thereto. Further guidance is provided in the appendices that follow.

Form RH2050 may be obtained online from the department's website at:

[Radioactive Material License Application:](https://www.cdph.ca.gov/CDPH%20Document%20Library/ControlledForms/rh2050.pdf)

<https://www.cdph.ca.gov/CDPH%20Document%20Library/ControlledForms/rh2050.pdf>

- B. All information requested in Appendices A-F of this checklist.

2. AMENDMENT Applications to a Radioactive Material License

For amendment requests, please provide a letter from the Radiation Safety Officer or an individual with financial and legal responsibility for the company requesting the required changes. Also include the information requested in the appropriate appendices of this checklist.

Amendments to a Radioactive Material License may include, but are not limited to, changes to any of the items listed below:

1. Company Ownership
2. Mailing / Billing Address
3. Radioactive Material Authorization
4. Personnel
5. Permanent Storage location(s)
6. Radiation Safety Program
7. Termination of Radioactive Materials License

Appendix A: Entity Information

1. Entity

- a. Name of the company, business entity, or individual (if self-employed) as you would have it appear on the license,
- b. Articles of Incorporation, Articles of Organization, or Fictitious Name Statement
- c. Current Business License at the location of use,
- d. Company tax identification number (EIN) or Social Security Number (if self-employed),
- e. Physical address (cannot be a P.O. Box),
- f. Mailing address (may be a P.O. Box), and
- g. Company Phone and fax numbers and email address.

2. Billing and Annual Fees

- a. Provide the name, title, mailing address, phone, and email address of the person responsible for accounts payable, and
- b. Provide a check payable to the Radiologic Health Branch for the required annual fees. The fee schedule can be found in California Code of Regulations, Title 17, Section 30231.

NOTE: Temporary job site authorization counts as one use location and must be accounted for in billing.

3. Temporary Jobsites

- a. Indicate whether temporary jobsites are required.

NOTE: Portable gauges are most commonly used at temporary job sites. Permanent locations include any sites where the gauge is stored longer than six months.

4. Change of Ownership

- a. For Change of Ownership amendment requests, please also provide the change of ownership form signed by representatives with financial and legal authority for both, the buyer and the seller, in addition to the items listed above.

A sample ownership change form can be found on the forms website.

- b. Provide an Organizational Chart (RSO and above) with names and titles of individuals.

Appendix B: Radioactive Material Authorization

1. Nuclide

- a. Name the nuclide(s) (e.g., Cesium-137, Americium-241:Be, Radium-226, Californium-252)
- b. State maximum activity of each source, (e.g., one source pair not to exceed 10 millicuries of Cesium-137 and 50 millicuries of Americium-241).
- c. Specify the *sealed source* information, including:
 - i. Manufacturer(s) and
 - ii. Model number(s) (Sealed source (ABC Corp. Model DEF)),
 - iii. Specify the number of sources to be possessed under the license,
 - iv. NOTE: Source manufacturer and model number are generally different than gauge manufacturer and model number.

2. Proposed Use

- a. Specify the gauge information, including
 - i. Manufacturer(s)
 - ii. Model number(s)
- b. Clearly state the intended use of the radioactive material (e.g., To be used as components of gauges, GHI Corp. Model JKL series, for determination of moisture/density in engineering materials).

3. Changes in possession Limit

- a. For an increase in possession limit, provide the make and model of the sealed source(s) and device(s) to be possessed, and

NOTE: Any annual fee increase resulting from a possession limit change must be paid before an amendment will be issued (see item 2.b in Appendix A of this document).
- b. For a decrease in possession limit, provide the following:
 - i. Receipt(s) for transfer of gauges signed by both the licensee and the party accepting the gauges,
 - ii. Radioactive Material License Number of the recipient if a California licensee, or a copy of the Radioactive Material License if an NRC or another agreement state licensee, and
 - iii. Leak tests of all gauges transferred.

Appendix C: Radiation Safety Officer and Authorized Users

1. Radiation Safety Officer (RSO) and Alternate Radiation Safety Officer (ARSO)

- a. Provide a letter from the person with legal and financial responsibility for the company, naming the RSO and ARSO,
 - i. If no ARSO is named, please explain.
- b. Provide the phone, fax, cell-phone (24-hr contact phone), and email address for the RSO and ARSO,
- c. Provide the completed Statement of Training and Experience (form RH2050A) for the RSO and ARSO, which may be obtained online from the department's website at: [Statement of Training and Experience:](https://www.cdph.ca.gov/CDPH%20Document%20Library/ControlledForms/rh2050a.pdf)
<https://www.cdph.ca.gov/CDPH%20Document%20Library/ControlledForms/rh2050a.pdf>
- d. Training certificates on gauge operation,*
- e. RSO training course certificate,*
- f. For RSO – provide the executed Duties and Responsibilities and Delegation of Authority, which may be obtained from the department website at:
[Duties and Responsibilities of the Radiation Safety Officer \(RSO\) for Portable Nuclear Gauge Facilities:](https://www.cdph.ca.gov/CDPH%20Document%20Library/ControlledForms/cdph8243IR3.pdf)
<https://www.cdph.ca.gov/CDPH%20Document%20Library/ControlledForms/cdph8243IR3.pdf>
[Delegation of Authority for Radiation Safety Officer \(RSO\):](https://www.cdph.ca.gov/CDPH%20Document%20Library/ControlledForms/cdph8243IR1.pdf)
<https://www.cdph.ca.gov/CDPH%20Document%20Library/ControlledForms/cdph8243IR1.pdf>
- g. For ARSO – provide the executed Duties and Responsibilities and Delegation of Authority, which may be obtained from the department website at:
[Duties and Responsibilities of the Alternate Radiation Safety Officer \(ARSO\) for Portable Nuclear Gauge Facilities:](https://www.cdph.ca.gov/CDPH%20Document%20Library/ControlledForms/cdph8243IA3.pdf)
<https://www.cdph.ca.gov/CDPH%20Document%20Library/ControlledForms/cdph8243IA3.pdf>
[Delegation of Authority for Alternate Radiation Safety Officer \(ARSO\):](https://www.cdph.ca.gov/CDPH%20Document%20Library/ControlledForms/cdph8243IA1.pdf)
<https://www.cdph.ca.gov/CDPH%20Document%20Library/ControlledForms/cdph8243IA1.pdf>
- h. Provide an Organizational Chart (RSO and above) with names and titles of individuals.

i. An updated Emergency Call-down list that includes the names and phone numbers (day and 24-hour numbers) of:

1. RSO,
2. ARSO (if applicable),
3. Gauge manufacturer(s),
4. Numbers listed below for local inspection agency and RHB:

24 Hour Radiation Emergency Assistance	1-800-852-7550
RHB Sacramento	1-916-327-5106
RHB Richmond	1-510-620-3416
RHB Brea	1-714-524-1409

* We currently accept gauge operator and gauge RSO training from: CPN, Troxler, Humboldt, Pacific Nuclear Technology, and APNGA.

2. Authorized Users

Changes in authorized users for portable gauges should not be submitted to the department, but records of the following must be kept on file for inspection by the department:

- a. Company RSO must provide written authorization to users of portable gauges under a company's license, and
- b. A completed form RH2050A and manufacturer's training certificates on gauge operation from an organization acceptable to the department, for each authorized user must be on file with the RSO.

Appendix D: Radiation Detection and Personnel Monitoring

1. Radiation Detection

The department requires that licensees possess and use or have access to and use, a Radiation Survey Meter that meets the criteria specified in the section titled “Radiation Safety Program – Instruments” in NUREG-1556 Volume 1, Revision 2, “Consolidated Guidance about Materials Licenses” Program-Specific Guidance about Portable Gauge Licenses,” in the event of an incident.

2. Please confirm in writing to the above requirement.

- A. If purchasing a survey meter, provide the inventory of survey instruments by:
 - i. Manufacturer,
 - ii. Model number, and
 - iii. Probe model number.
 - iv. Specify the method and frequency of calibration of survey instruments
- B. If not purchasing a survey meter, please describe how you plan to obtain access and use a survey meter in the event of an incident. You may use an instrument located on site or obtain one from the applicant’s home office, another licensee, a consultant, or a local emergency response organization.

3. Personnel Monitoring

Please confirm in writing to using dosimetry processed and evaluated by an NVLAP-approved processor that is exchanged at a frequency recommended by the processor.

Appendix E: Facilities and Equipment

1. Adding a permanent storage location

- a. Describe the permanent storage location(s).
- b. Provide a street address where the gauges will be stored,
 - i. Residential storage is prohibited,
 - ii. NOTE: Different licensees shall not share the same storage area.
 - iii. Confirm the following will be posted at each storage location:
 1. "Caution, Radioactive Material" sign with the international radiation symbol,
 2. "Notice to Employees" (Form RH-2364, provided by the Department), and
 3. Current copy of
 - a) The radioactive material license,
 - b) The state and federal regulations (Title 17, California Code of Regulations, and Title 10, Code of Federal Regulations, Part 20), and
 - c) The operating and emergency procedures.
 - d) Or confirm a notice will be posted that describes these three documents and states where they are kept available for review.
- c. Submit an 8-1/2" x 11" diagram of the gauge storage location(s),
 - i. Specify the location of the gauge within the room,
 - ii. Describe all adjacent areas and their use (e.g., office, storage, lab, parking lot, neighboring suite), and
 - iii. Indicate on the diagram the location of the nearest full-time workstation,
NOTE: No full-time workstation can be located within 10 feet of the gauge storage area. Consider neighboring suites as well.
- d. If using public storage facility, provide copies of written notifications to the facility proprietor, local police, and the local fire department.
- e. Confirm that radiation levels below 2 mR/hr will be maintained for all unrestricted areas.
- f. Describe the gauge storage box/cabinet/room (i.e., construction material and approximate dimensions).
- g. Indicate the maximum number of gauges that the storage box/cabinet/room can hold.
- h. Describe (or indicate on the diagram) the security used to prevent unauthorized removal of the gauge. NOTE: A minimum of three levels of security is recommended (e.g., gauge case, storage cabinet, room, and building).
- i. State who has access to any keys used. Confirm that access to radioactive material will be restricted to authorized users only.

- j. Describe (or indicate on the diagram) how the gauge will be recharged while in storage.
- k. Provide the land use zoning of the storage location (e.g., industrial, commercial).
- l. Describe procedures employed in the event of overnight storage at temporary job sites (if applicable), including:
 - i. A description of the storage box/cabinet/room,
 - ii. Postings, and
 - iii. Security.
- m. Confirm that the following will be posted at temporary jobsites:
 - i. "Caution, Radioactive Material" sign with the international radiation symbol,
 - ii. "Notice to Employees" (Form RH-2364, provided by the Department), and
 - iii. Current copy of
 - 1. The radioactive material license,
 - 2. The state and federal regulations (Title 17, California Code of Regulations, and Title 10, Code of Federal Regulations, Part 20), and
 - 3. The operating and emergency procedures.
 - 4. OR Confirm a notice will be posted that describes these three documents and states where they are kept available for review.

2. Decommissioning a permanent storage location / Terminating use of Radioactive Materials under a license

For decommissioning a permanent storage location, or terminating the use of radioactive materials license, when only sealed sources were possessed by the licensee, please follow *Guidance for Termination or Decommission for Sealed Source Use Only*. This document may be obtained from the department's website at:

[Guidance for Termination or Decommission for Sealed Source Use Only:](https://www.cdph.ca.gov/Programs/CEH/DRSEM/CDPH%20Document%20Library/RHB/RML/GuideForTerminationAndDecomForSealedSources.pdf)

<https://www.cdph.ca.gov/Programs/CEH/DRSEM/CDPH%20Document%20Library/RHB/RML/GuideForTerminationAndDecomForSealedSources.pdf>

Appendix F: Radiation Safety Program

1. Radiation Safety Program

Submit your Radiation Safety Program (RSP). You may consider contacting the gauge manufacturer for a copy of their sample program and then modifying to fit your program.

Include the following in your RSP:

- a. Information requested in items 5, 8, 9, 12 and 13 of the application (form RH2050).
- b. Information contained in Appendices B, C, D and E of this checklist.
- c. RSO Duties and Responsibilities.
- d. Operating and Emergency procedures with an Emergency Call-down list.
- e. Leak Test procedures
 - i. Confirm that leak tests for the gauge(s) will be performed at intervals not to exceed 12 months,
 - ii. Identify the individual or company who collects your leak test samples,
NOTE: Only the RSO or individuals designated in writing by the RSO may collect leak test samples,
 - iii. Confirm that the manufacturer's instructions for collecting leak test samples will be followed,
 - iv. Identify the vendor that provides your leak test kit, and
 - v. Identify the vendor that performs your sample analysis.
- f. Submit your gauge transportation procedures, including:
 - i. Method of transport,
 - ii. Use of DOT-approved packages,
 - iii. Bracing, blocking, and security, and
 - iv. HAZMAT training.
- g. Confirm that the shipping paper will be within arm's reach of the driver during transit.
- h. Submit a copy of the shipping paper. Please ensure it is using the correct shipping names and UN numbers. Also ensure that someone other than the driver is listed as the emergency contact list on the shipping paper. The emergency contact should be knowledgeable about the materials being shipping and their handling during emergencies.
- i. Confirm that the following documents will be carried to temporary job sites:
 - i. Copy of your license,
 - ii. Manufacturer's instruction manual,
 - iii. Authorized user list, signed by the RSO, and

- iv. Your operating and emergency procedures with an emergency call down list.
- j. Confirm that the Department will be notified as soon as practicable, but within 24 hours, of theft, loss, or damage to a gauge.
- k. Confirm a utilization log will be maintained, and submit a copy of the log, that includes:
 - i. gauge serial number
 - ii. gauge operator
 - iii. date out
 - iv. destination
 - v. date of return
- l. Confirm that a semi-annual inventory will be conducted:
 - i. Include manufacturer(s), Model Number, Serial Number, and Location.
NOTE: RSO or someone authorized by the RSO in writing must perform a physical inspection of the gauge(s).
- m. Confirm that an annual audit of the Radiation Safety Program will be performed.
- n. Confirm that all records will be maintained for inspection as required by 17 CCR § 30293.
- o. Confirm that annual radiation safety refresher training internally (e.g., by the RSO) or externally (e.g., by the manufacturer) will be provided to all users.
NOTE: All training records must be maintained for inspection.
- p. Waste Disposal
 - i. Confirm that the gauge will be returned to the manufacturer or transferred to another specific licensee of the U. S. Nuclear Regulatory Commission or an Agreement State.
NOTE: Receipt records must be provided at termination of this license.
- q. Decontamination and Decommissioning
 - i. Confirm that the Department will be notified at least 30 days prior to vacating or relocating a storage area.
 - ii. Provide copies of current leak tests for all gauges stored at the location being vacated.
NOTE: A storage location cannot be vacated or relocated until written approval is obtained from the Department via a completed license amendment or termination. Leak test records must be provided to release any facility.

Appendix G: Change of Ownership Sample

Company Letterhead

PART I

Pursuant to Title 17, California Code of Regulations, Section 30194 (c), [Legal Name], Transferor, holder of Radioactive Material License Number [License Number], as amended as of the date of the last amendment, requests California Department of Public Health approval to transfer such license to [Name of transferee], effective [Date].

[Signature]
[Printed or typed Name]
[Title]
[Date]

☞ **This section to be completed by Seller
(Must be person with financial responsibility, CEO,
VP, Owner, etc.)**

PART II

[Legal Name], Transferee, hereby declares and attests that, as to Radioactive Materials License Number [License Number], the following to be true:

1. Transferee has knowledge of the terms and conditions of such license;
2. Transferee certifies that only a name change is involved, i.e., there is no change in facilities, Radiation Safety Officer, users, locations or procedures.
3. Upon approval, Transferee shall comply with the terms and conditions of such license.
4. Upon approval, Transferee shall comply with all applicable rules, regulations, and orders of the California Department of Public Health now or hereafter in effect.
5. As to operations under Radioactive Materials License Number [License Number], Transferee will conduct business under the name of [d.b.a. name].
6. Transferee understands that clean up of any radioactive contamination that exists in the facility subject to Radioactive Materials License Number [License Number] as of the date of transfer becomes the responsibility of the transferee.

[Signature]
[Printed or typed Name]
[Title]
[Date]

☞ **This section to be completed by Seller
(Must be person with financial responsibility, CEO,
VP, Owner, etc.)**