

## Fixed Medical Facilities

These are specific medical licenses for unsealed radioactive material administered as pharmaceuticals or the radiation from sealed sources used internally or externally for diagnostic or therapeutic purposes. Most Vermont hospitals have nuclear medicine departments for diagnostic uses, while several others have radiation therapy departments and interventional radiology for therapeutic uses. Certain private physicians may also be licensed to use radioactive materials for only diagnostic procedures.

See the [NRC Medical Uses Licensee Toolkit](#) for regulation, guidance and license types.

## Mobile Medical Services

This is a specific medical license for unsealed radiopharmaceuticals or the radiation from sealed sources administered to patients for diagnostic purposes from a mobile medical unit instead of a fixed facility. This type of license is similar to a medical license but is smaller in scope, while performing at temporary locations.

See the [NRC Medical Uses Licensee Toolkit](#) for regulation, guidance and license types.

## Portable Moisture/Density Gauges

These are specific licenses for the use of small sealed radioactive sources in portable test equipment to measure moisture and/or density of construction materials, roadbeds, roofing or agricultural land. These licenses are used by the construction industry at various construction sites.

See the [NRC Gauging Devices Licensee Toolkit](#) for regulation, guidance and license types.

## Commercial Nuclear Pharmacy

This is a specific medical license for the use of unsealed radiopharmaceuticals prepared for diagnostic and therapeutic uses that is distributed to hospitals and private practices licensed and authorized to receive the radioactive drugs.

See the [NRC Medical Uses Licensee Toolkit](#) for regulation, guidance and license types.

## Research and Development

These are specific licenses issued for sealed and/or unsealed radioactive material used to study living systems and to improve or test products or materials. Users may include biotechnology firms, colleges and universities, and testing labs.

See the [NRC Research and Development Licensee Toolkit](#) for regulation, guidance and license types.

## Self-Shielded Irradiators

This is a specific license for the use of gamma radiation from sealed sources to irradiate materials such as blood and blood products to prevent engraftment and proliferation of lymphocytes capable of mounting an immune response against the recipient. Irradiators may also be used for other purposes such as genetic research. These devices are used in blood banks and universities.

See the [NRC Irradiator Licensee Toolkit](#) for regulation, guidance and license types.

## Fixed/Level Gauges

These are specific licenses for the use of small sealed radioactive sources in permanently mounted test equipment to measure the density or flow of material within a pipe or vessel. These are used in power plants and other industrial applications.

See the [NRC Gauging Devices Licensee Toolkit](#) for regulation, guidance and license types.

## Industrial Radiography

These are specific licenses for the use of radiation from sealed radioactive sources at various locations to create images of the inside of objects, for example, to inspect pipe welds for internal flaws. These are used primarily by Non-Destructive Testing (NDT) companies.

See the [NRC Industrial Radiography Licensee Toolkit](#) for regulation, guidance and license types.

## Well Logging and Flood Tracer Studies

This is a specific license for the use of sealed sources and unsealed sources for well logging and flood tracer studies. Well logging is the practice of making a detailed record of the geographic formations penetrated by a specially designed drill, containing radioactive sources to determine stratigraphic profiles, and also the porosity/density of the formation. Flood tracer studies use radioactive materials to identify the movement of water, especially underground.

See the [NRC Well-Logging Licensee Toolkit](#) for regulation, guidance and license types.

## **Decontamination Services**

This is a specific license for cleaning of scrap materials so they may be authorized for release for unrestricted use.

See the [NRC Service Provider Toolkit](#) for regulation, guidance and license types.

## **Veterinary Use**

This is a specific license for the use of unsealed radioactive material to treat animals, for example, feline hyperthyroidism.

See the [NRC Veterinary Uses Toolkit](#) for regulation, guidance and license types.

## **Reciprocity**

Reciprocity (recognition of licenses from other jurisdictions) approvals are granted to out-of-state licensees which are valid for one year, which then allows the authorized company to use radioactive material in Vermont for up to 180 days in a calendar year, provided they comply with the requirements of the Vermont Radiological Health Rules. If users work more than 180 days in any twelve consecutive months, they must instead apply for and obtain a Vermont-specific license.

For guidance, see the [NUREG 1556 Volume 19 Guidance](#) about NRC Form 241 Report of Proposed Activities in Non-Agreement States, Areas of Exclusive Federal Jurisdiction, or Offshore Water and guidance for Licensees Proposing to Work in Agreement States (Reciprocity).

Any person who holds a specific license from U.S. NRC or an Agreement State may be granted permission to conduct its activities (as authorized in the license) within Vermont. Use the [Radioactive Material Reciprocity Request form](#) to apply for reciprocity and call the Radioactive Materials Program.

## **Contact Information**

Vermont Department of Health  
Radioactive Materials Program  
P.O. Box 70 – Drawer 30  
Burlington, VT 05402

**Phone:** 802-863-7220 or 800-439-8550 (toll-free in Vermont)

**Fax:** 802-865-7745

**Email:** [AHS.VDHEnvHealth@vermont.gov](mailto:AHS.VDHEnvHealth@vermont.gov)

**Website:** [healthvermont.gov/radioactive-materials-program](http://healthvermont.gov/radioactive-materials-program)