**Generally Licensed Radioactive Material**

**Registration Form**

University Isotopes Committee, Penn State University

Complete the items in the form below using as much space as required for each entry. Read the Section 7 “Requirements and Restrictions” then sign and date the registration certifying your understanding of these requirements. Submit this form **electronically** to The Office for Research Protections at ORP-Isotope@psu.edu. The form should be submitted in Microsoft Word document format or in Rich Text Format (rtf) as an attachment from the Principal Investigator’s Penn State Email account. If you have trouble submitting this form electronically, please contact ORP at 814-865-1775.

This form is to be used **only** for registering generally licensed radioactive material sources contained in devices designed and manufactured for the purpose of detecting, measuring, gauging or controlling thickness, density, level, interface location, radiation, leakage, or qualitative or quantitative chemical composition, or for producing light or an ionized atmosphere. This would include such items as electron capture gas chromatographs containing either H-3 or Ni-63, some self-luminous products containing H-3, de-ionization devices containing Kr-85, liquid scintillation counters, and other similar types of devices. If you have any question as to whether your source is generally licensed or not, please contact Environmental Health & Safety (814-865-6391).

1. **Registrant Information:**

|  |  |  |  |
| --- | --- | --- | --- |
| Last Name |  | First Name |  |
| College |  | Department |  |
| Office (Room & Bldg) |  | Email (Penn State) |  |
| Campus Mail |  |
| Office phone |  | Laboratory phone |  |
| Home phone (required) |  | Cell phone (Emergency) |  |

1. **Type of Application:**

[ ]  New registration: [ ]  Renewal of current registration:

1. **Radionuclides, Devices, and Activities:** List each device separately. See examples at end of this file.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Radio-nuclide | Initial Activity(mCi) | Device Type and Manufacturer andSource description | Machine and deviceSerial Numbers | PSU number assigned by EHSYear-number\* |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

\* If available.

1. **Location where Generally Licensed Source(s) is Used or Stored:**

 Room No.: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Building:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Campus: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. **Applicants Statement:**

**I have read and understand the attached requirements and restrictions and I agree to comply with the University Rules and Procedures for the Use of Radioactive Material.**

Submitted by: \_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. **Radiation Protection Office Approval:**

By: \_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_

1. **Requirements and Restrictions:**

The radioactive material contained in the device described above falls under the conditions and restrictions of a general license for the use of radioactive materials issued by the Nuclear Regulatory Commission and/or the Pennsylvania Department of Environmental Protection, Bureau of Radiation Protection. All such devices governed under a general license shall be registered with the Radiation Protection Office. Use of the device at Penn State University, and the radioactive material contained therein, shall be in accordance with the requirements specified below.

The Registrant shall:

1. Assure that all labels affixed to the device at the time of receipt and bearing a statement that removal of the label is prohibited, specifically labels identifying the presence of radioactive material, are maintained on the device and shall comply with all instructions and precautions provided by such labels. If not already identified, the label information must include the radionuclide, original activity and assay date.
2. Assure the proper operation of the on‑off mechanism and indicator, if any, at no longer than six‑month intervals or at such other intervals as are specified in the label.
3. Assure that the tests required by paragraph B above and other testing, installation, servicing, and removal from installation involving the radioactive materials, its shielding or containment, are performed in accordance with the instructions provided by the labels or by a person holding a specific license pursuant to parts 30 and 32 of Title 10 of the Code of Federal Regulations, or from an Agreement State, to perform such activities.
4. Maintain records showing compliance with the requirements of paragraphs B and C above. The records must show the results of tests, the dates of performance of, and the names of persons performing, testing, installing, servicing, and removing from the installation radioactive material and its shielding or containment. These records must be retained for three years or until the sealed source is disposed of.
5. Upon the occurrence of a failure of or damage to, or any indication of a possible failure of or damage to, the shielding of the radioactive material, or the on‑off mechanism or indicator, or upon the detection of 0.005 microcurie or more removable radioactive material, immediately suspend operation of the device and inform the Radiation Protection Office of the occurrence. Further use of the device is prohibited until the device has been repaired by the manufacturer or other persons authorized to perform such work, or disposed of by transfer to a person authorized to receive the radioactive material contained in the device.
6. Use the device, and radioactive material contained therein, as intended and directed by the equipment manufacturer. The radioactive source may not be opened, machined, ground, drilled, tapped or modified in any way.
7. Not abandon, export, transfer or dispose of the device, or radioactive material, without the prior written approval of the Radiation Protection Office.
8. Immediately notify the Radiation Protection Office in the event the device is, or is presumed to be, lost, missing or stolen.
9. Notify the Radiation Protection Office prior to relocating the device to another location not originally identified in this Registration application. The device may not be relocated until the Radiation Protection Office has approved the new location for use.
10. Notify the Radiation Protection Office when acquiring any additional devices or replacement radioactive sources. Replacement sources and new devices may only be purchased from manufacturers who guarantee to accept return of the radioactive source for disposal.
11. Follow these specific restrictions for users of electron capture gas chromatographs:
	1. Devices containing titanium tritide or scandium tritide foils (H-3) shall only be used in conjunction with a properly operating temperature control mechanism which prevents the foil temperatures from exceeding the maximum temperature identified in the manufactures specifications.
	2. Devices containing titanium tritide or scandium tritide foils (H-3) shall be vented to the outside.
	3. Radioactive replacement sources may be installed by the user only under the direct supervision of a member of the Radiation Protection Office.
12. Find a qualified person to take responsibility for the radioactive material during their absence leaving campus for greater than six weeks. The supervisor must notify the Radiation Protection Office of the intended designated responsible individual. The Radiation Protection Office will review the requirements contained in this registration form with the new individual.
13. Be responsible for any special fees that apply to the use or registration of this equipment required by the Nuclear Regulatory Commission or the Pennsylvania Bureau of Radiation Protection.
14. Be responsible for the costs of disposal of these devices if they become damaged to the extent that the sources may not be returned to the vendor.
15. Ensure that all persons using the equipment identified in this registration have been adequately trained in the proper use of the equipment and are aware of the requirements and restrictions contained in this registration.
16. **Not hold devices that remain unused for longer than 2 years**. If devices with shutters are not being used, the shutter must be locked in the closed position. Devices kept in standby for future use are excluded from the two‑year time limit only if the general licensee performs **quarterly physical** inventories of these devices while they are in standby. Licensees may transfer the radioactive source to EHS for long term storage.

Note: Most of these requirements are specifically listed in Title 10, Code of Federal Regulations, Part 31.5. Other requirements listed here are to aid Radiation Protection Office in performing its leak-testing and inventory certification functions.

**Attachment:** Example for item No. 3 – Radionuclides, Devices and Activities

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Radio-nuclide | Initial Activity (mCi) | Device Type and Manufacturer and Source description | Machine and deviceSerial Numbers | PSU number assigned by EHS Year-number |
| Cs-137 | 0.030 | Beckman -8500 LSC external standard | 7777777 / not applicable | 2000-0001  |
| Ni-63 | 15 | Hewlett-Packard 3450Gas Chromatography  | 777777 / AA856 | 2001-0001  |
| Po-201 | .1 | NRD Static Master device | 777777 / N/A | 2002-0001 |