

Leak Test Instructions

Each sealed source contained in a portable gauging device must be tested at regular intervals to ensure that the radioactive material is secure within its capsule and not leaking contamination.

I. Leak Test Frequency

Portable nuclear gauges must be leak tested at intervals established by the gauge manufacturer and/or your license, whichever is more frequent. Typically these intervals are every 6 or 12 months.

II. Leak Test Kit

Only LT kits provided by licensed vendors will be used to sample sealed sources contained in portable gauging devices.

III. Taking the Leak Test Sample

LT samples will be taken only by Authorized Users, wearing their assigned personnel monitoring badges. LT samples will be taken in accordance with the written instructions provided by the supplier of the LT kit and the portable gauging device manufacturer.

IV. Leak Test Sample Analysis

LT sample analysis will be performed only by vendors specifically licensed to provide the service by the U.S. Nuclear Regulatory Commission or other state radiation control agencies.

V. Leak Test Records

If a test indicates a device's sealed source is contaminated, the portable gauging device will be removed from service and the regulatory agency will be notified immediately. A written report on the leaking source will be submitted to the agency within 5 days. The report will describe the equipment involved, the test results, and the corrective actions taken (i.e., device removed from service until repaired; radiation surveys conducted to determine presence of contamination; decontamination as necessary).

Leak test records will be retained for 3 years. The records will include the following information:

- ◆ Each source's manufacturer name, model, and serial number;
- ◆ The identity of each sealed source radionuclide and its estimated activity, expressed in microcuries (or becquerels);
- ◆ The measured activity of each leak test sample, in microcuries (or Bq);
- ◆ The date the sample was collected; and
- ◆ The signature of the Radiation Safety Officer (or the RSO's designee).