

WAC 246-244-080 Leak testing of sealed sources. (1) Testing and recordkeeping requirements. Each licensee who uses a sealed source shall have the source tested for leakage periodically. The licensee shall keep a record of leak test results in units of becquerels (or microcuries) and retain the record for inspection by the department for three years after the leak test is performed.

(2) Method of testing. The wipe of a sealed source must be performed using a leak test kit or method approved by the department, an agreement state, a licensing state, or the United States Nuclear Regulatory Commission. The wipe sample must be taken from the nearest accessible point to the sealed source where contamination might accumulate. The wipe sample must be analyzed for radioactive contamination. The analysis must be capable of detecting the presence of 185 Bq (0.005 microcurie) of radioactive material on the test sample and must be performed by a person approved by the department, an agreement state, a licensing state, or the United States Nuclear Regulatory Commission to perform the analysis.

(3) Test frequency.

(a) Each sealed source (except an energy compensation source (ECS)) must be tested at intervals not to exceed six months. In the absence of a certificate from a transferor that a test has been made within the six months before the transfer, the sealed source may not be used until tested.

(b) Each ECS that is not exempt from testing in accordance with subsection (5) of this section must be tested at intervals not to exceed three years. In the absence of a certificate from a transferor that a test has been made within the three years before the transfer, the ECS may not be used until tested.

(4) Removal of leaking source from service.

(a) If the test conducted under subsections (1) and (2) of this section reveals the presence of 185 Bq (0.005 microcurie) or more of removable radioactive material, the licensee shall remove the sealed source from service immediately and have it decontaminated, repaired, or disposed by a department, an agreement state, a licensing state, or a United States Nuclear Regulatory Commission licensee that is authorized to perform these functions. The licensee shall check the equipment associated with the leaking source for radioactive contamination and, if contaminated, have it decontaminated or disposed of by a department, an agreement state, a licensing state, or a United States Nuclear Regulatory Commission licensee that is authorized to perform these functions.

(b) The licensee shall submit a report to the department within five days of receiving the test results. The report must describe the equipment involved in the leak, the test results, any contamination that resulted from the leaking source, and the corrective actions taken up to the time the report is made.

(5) Exemptions from testing requirements. The following sealed sources are exempt from the periodic leak test requirements set out in subsections (1) through (4) of this section:

(a) Hydrogen-3 (tritium) sources;

(b) Sources containing licensed material with a half-life of thirty days or less;

(c) Sealed sources containing licensed material in gaseous form;

(d) Sources of beta- or gamma-emitting radioactive material with an activity of 3.7 MBq (100 microcuries) or less; and

(e) Sources of alpha- or neutron-emitting radioactive material with an activity of 0.37 MBq (10 microcuries) or less.

[Statutory Authority: RCW 70.98.050. WSR 03-12-062, § 246-244-080, filed 6/2/03, effective 7/3/03. Statutory Authority: RCW 70.98.050 and 70.98.080. WSR 91-15-112 (Order 184), § 246-244-080, filed 7/24/91, effective 8/24/91. Statutory Authority: RCW 43.70.040. WSR 91-02-049 (Order 121), recodified as § 246-244-080, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. WSR 87-01-031 (Order 2450), § 402-38-140, filed 12/11/86.]