**Section 351.350 Leak Testing of Sealed Sources**

a) Testing and Recordkeeping Requirements. Each licensee who uses a sealed source shall have the source tested for leakage as described in subsection (c). The licensee shall keep a record of leak test results under 32 Ill. Adm. Code 340.1135.

b) Method of Testing. The wipe of a sealed source shall be performed using a leak test kit or method approved by the Agency, the U.S. Nuclear Regulatory Commission, or an Agreement State. The wipe sample shall be taken from the nearest accessible point to the sealed source where contamination might accumulate. The wipe sample shall be analyzed for radioactive contamination. The analysis shall be capable of detecting the presence of 185 Bq (0.005 microcuries) of radioactive material on the test sample and shall be performed by a person approved by the Agency, the U.S. Nuclear Regulatory Commission, or an Agreement State to perform the analysis.

c) Test Frequency

1) Each sealed source, except an energy compensation source (ECS), shall be tested at intervals not to exceed 6 months. In the absence of a certificate from a transferor that a test has been made within the 6 months before the transfer, the sealed source may not be used until tested.

2) Each ECS that is not exempt from testing pursuant to subsection (e) shall be tested at intervals not to exceed 3 years. In the absence of a certificate from a transferor that a test has been made within the 3 years before the transfer, the ECS may not be used until tested.

d) Removal of Leaking Source from Service

1) If the test conducted pursuant to subsections (a) and (b) reveals the presence of 185 Bq (0.005 microcuries) or more of removable radioactive material, the licensee shall remove the sealed source from service immediately and have it decontaminated, repaired, or disposed of by an Agency, U.S. Nuclear Regulatory Commission, or Agreement State 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 an Agency, U.S. Nuclear Regulatory Commission, or Agreement State licensee that is authorized to perform these functions.

2) Reports of test results for leaking or contaminated sealed sources shall be made pursuant to 32 Ill. Adm. Code 340.1260.

e) Exemptions from Testing Requirements. The following sealed sources are exempt from the periodic leak test requirements set out in subsections (a) through (d):

1) Hydrogen-3 (tritium) sources;

2) Sources containing licensed material with a half-life of 30 days or less;

3) Sealed sources containing licensed material in gaseous form;

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

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