**Section 346.330 Irradiator Pools**

a) For licenses initially issued after December 1, 2005, irradiator pools shall either:

1) Have a water-tight stainless steel liner or a liner metallurgically compatible with other components in the pool; or

2) Be constructed so that there is a low likelihood of substantial leakage and have a surface designed to facilitate decontamination.

In either case, the licensee shall have a method to safely store the sources during repair of the pool.

b) For licenses initially issued after December 1, 2005, irradiator pools shall have no outlets more than 0.5 meter below the normal low water level that could allow water to drain out of the pool. Pipes that have intakes more than 0.5 meter below the normal low water level and that could act as siphons shall have siphon breakers to prevent the siphoning of pool water.

c) A means shall be provided to replenish water losses from the pool.

d) A visible indicator shall be provided in a clearly visible location to indicate if the pool water level is below the normal low water level or above the normal high water level.

e) Irradiator pools shall be equipped with a purification system designed to be capable of maintaining the water during normal operation at a conductivity of 20 microsiemens per centimeter or less and with a clarity so that the sources can be seen clearly.

f) A physical barrier, such as a railing or cover, shall be used around or over radiator pools during normal operation to prevent personnel from accidentally falling into the pool. The barrier may be removed during maintenance, inspection and service operations.

g) If long handled tools or poles are used in irradiator pools, the radiation dose rate in the handling areas of the tools may not exceed 0.02 millisievert (2 millirems) per hour.

(Source: Amended at 47 Ill. Reg. 9201, effective June 22, 2023)